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Personality and the gender gap in political ambition

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Personality and the gender gap in political ambition

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Abstract

In this paper we offer an analysis of the gender gap in political ambition that takes personality and other canonical predictors of levels of ambition into account simultaneously. We use original large-N survey data from Britain. We find that the gender gap in nascent ambition is robust to the inclusion of measures of personality alongside traditional socioeconomic predictors of political ambition. Second, we find that increased extraversion is related to higher levels of nascent ambition, but only for women. Third, we find that personality does not drive any move from intending to run for office to actually doing so.

Key words

Political ambition; personality; five factor model; political participation; gender gap; Britain

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Personality and the gender gap in political ambition

The gender gap in political ambition has been well-established by studies in a number of advanced democracies (Lawless and Fox 2005, 2010; Allen and Cutts 2018). Explanations at the aggregate-level focus on institutionalised sexism in political parties and institutions, while individual-level explanations instead focus on gendered socialization. More recently, attention has turned to personality traits as a possible explanation of individual-level political ambition. Individual-level personality traits have been shown to be associated with a range of political attitudes and behaviours, including turning out to vote and ideological preferences (Mondak 2010). Intuitively, it makes sense that personality might be associated with political ambition: some people are more outgoing or confident or decisive than others, and evidence suggests that these kinds of personality traits loom large in public perceptions of what makes a good politician (Clarke et al. 2018). To date, though, this recent research examining how personality and other traits identified by psychologists may affect ambition remains separate from existing research focused more on explanations of the gender gap centred on differential patterns of role socialization across the sexes. Consequently, as of yet we have only a limited understanding of how personality sits alongside these other variables as explanations of the gender gap in political ambition.

In this paper we offer, to the best of our knowledge, the first account of the gender gap in political ambition that takes both personality (measured using the Five Factor Model) and other canonical predictors of levels of ambition into account simultaneously. To explore the interaction of personality and ambition more deeply than existing accounts, we use original and unique cross-sectional 10,000 N data from Britain, collected in 2017, which includes a range of survey items relating to political ambition, political attitudes, and political participation. We address three main research questions. First, we ask whether the gender gap in nascent ambition (an initial consideration of running for office) is affected by the inclusion of personality measures and whether any sex effect holds after accounting for personality as well as other predictors. Second, we ask whether interaction effects suggest that exhibiting certain personality traits has differential effects for both men and women – do these ‘work’ differently depending on sex? Third, we examine whether sex and personality have differential effects at different stages of the ambition process – for example, differing between someone initially thinking about running for office and then actually doing so. Addressing each in turn, we first find that the gender gap in nascent ambition is robust to the inclusion of measures of personality alongside traditional socioeconomic predictors of political ambition. Second, we discover that being an especially extraverted woman makes you more likely to have considered running for office while this doesn’t matter for men. Third, we find that, when we consider action and not just intention, personality is not the driver that causes someone to move from intending to run for office to actually doing so.

The gender gap in political ambition

Within modern academic writing on the issue of political ambition, the existence of a gender gap is perhaps the most prominent concern. Arising from a growing interest in political recruitment among feminist political scientists in the 1980s and 1990s (Norris and Lovenduski 1995), the tremendous influence of the work of Jennifer Lawless and Richard Fox (2005; 2010) has led to almost all research on political ambition either focusing on the question of gender either in full or in part. Various studies have examined progressive ambition (Allen 2013), the question of recruitment and gender (Allen and Cutts 2017), potential role model effects, the

framing of politics as an activity and the purpose of holding political office (Schneider et al. 2016), and election aversion (Kanthak and Woon 2015).

Lawless and Fox (2005, 2010) framed their interest in gender, and in a range of other socioeconomic variables that they expected to influence levels of political ambition, as a reaction to an older literature that considered the question of political ambition in purely rational choice terms. On this older account, an individual would run for office when the opportunity presented itself. The assumption inherent here was that everyone was ambitious and that ambition was something of an innate characteristic (Shames 2017). Consequently, whether or not someone actually ran for office or not would be simply a question of circumstances rather than of underlying resources or access to political institutions among other factors. Lawless and Fox (2005, 2010) moved beyond the simple contention that individuals would run for office when the opportunity arose and instead considered how various socioeconomic variables interacted with gender to produce a gender gap in political ambition. They identify a range of factors, considered collectively as being part of a wider pattern of ‘gendered socialization’, as eventually resulting in the gender gap in political ambition. Against this, a positive self-assessment of political ability and encouragement from friends, family, and political sources are particularly important influences more likely to result in a woman considering a run for office (Allen 2013). Critically, though, a range of influences dampen women’s ambition, including their caring responsibilities, the fact that they are less likely to be recruited for office than an equivalently-placed man, that they see themselves as less qualified than similar men, and has considered the role of gendered institutions, which might have a dampening effect on women’s ambition (Kenny 2013).

The Five Factor Model of personality, gender, and political ambition

Over time, though, research on gender and political ambition has shifted from a focus on women’s life circumstances to various external influences or stimuli acting on women and then, ultimately, to women themselves. Most recently, this has seen researchers consider the role of a range of psychological variables in the gender gap as well as in the development and demonstration of political ambition overall. In terms of why researchers have been motivated to explore the relationship between personality traits and political ambition, this interest arguably grew out of a broader disciplinary concern with the relationship between personality and political behaviour (Mondak 2010; Gerber et al. 2010, 2011). Much of this research has focused on the Big Five or the Five Factor Model (FFM) of personality. The five traits included in the FFM are Extraversion, Agreeableness, Conscientiousness, Openness to Experience, and Emotional Stability. Extraversion is associated with multiple behaviours suggesting a kind of enthusiasm and joyfulness about the world – extraverts get involved, are outgoing, show their emotions, are proactive, and are passionate. Those who show high levels of Agreeableness are trusting, generous, forgiving, good-natured, and tend to rub along well with others. Individuals who are high in Conscientiousness are hardworking, well-organized, focused, persistent, and take great care over their actions. Those who are Open to Experience are imaginative, creative, curious, and enjoy encountering novel things and experiences. Finally, those who display higher levels of Emotional Stability are calm, even-tempered, self-satisfied, and even-handed about events (McCrae and Costa 2003).

As Gerber et al. (2011, p.266) note, ‘Psychologists refer to these traits as dispositional or core traits. This label differentiates the Big Five from other aspects of individuals’ personalities such as their characteristic adaptations (values, attitudes, interests), self-concepts (self-esteem, identity), and objective biography (careers, background)’ (Gerber et al. 2011, p.266). Based on

this, it is perhaps intuitive to consider the traits outlined above in terms of their relationship to political ambition. We might consider political ambition to be a characteristic adaptation – a ‘concrete manifestation[s] of basic tendencies’ (McCrae and Costa 1996, p.69) – that is influenced by the presence or absence of certain core traits. That is to say, political ambition is most likely the result of a combination of innate dispositional traits and situational factors. For example, given the range of activities that running for political office entails – knocking on doors, canvassing for votes, speaking in the media – we might expect individuals higher in Extraversion and Openness to Experience to be generally better disposed to undertaking the task than those who exhibit only low levels of these traits (Dynes et al. 2019). Conversely, individuals low in Emotional Stability might appear as unattractive potential candidates to political gatekeepers, as might individuals who are low in Conscientiousness. In this sense, personality traits work in both directions; as push factors that might predispose someone to be more likely to consider running for office (or not), but also as potential pull factors that are considered by gatekeepers during the process of doing so.

Building on existing research in the psychology literature, there is also good reason to think that accounting for personality in relatively complete models of political ambition might affect or further illuminate the gender gap we consistently find in it. Personality might matter not least because existing studies of the FFM have found persistent and significant differences in trait exhibition between men and women (Weisberg et al. 2011). They find higher levels of Extraversion, Agreeableness, and Neuroticism (i.e. lower scores of Emotional Stability) among women than men (Weisberg et al. 2011). These findings build on earlier studies that found women to be higher in Agreeableness, Warmth, Openness, and Neuroticism (again, equivalent to lower levels of Emotional Stability) (Costa Jr. et al. 2001). Overall, the pattern across studies is as follows: women score higher on Neuroticism, Agreeableness, and Extraversion, with greater variation in findings around Openness to Experience and Conscientiousness. Although not directly related to the Big Five, research by Kris Kanthak and Jonathan Woon has identified how women display higher levels of conflict aversion (in the form of electoral contestation) than men (2015). Similarly, Monika L. McDermott has demonstrated that gendered personality traits, mapping onto a spectrum of masculinity and femininity, relate to a range of political behaviours including propensity to engage in formal political activity (McDermott 2016). Indeed, this can have subsequent effects on how individuals are perceived, and therefore treated, by other political actors. Sarah Oliver and Meredith Conroy show, for example, that ‘women who self-identify as possessing more masculine personality traits report being recruited to run for political office at higher rates than both men and women who are less masculine’ (2018, p.1095).

Consequently, we might expect to find that the interaction of personality traits and gender differs for men and women in the political environment or that, in a model of political ambition, accounting for variation in personality types ‘mops up’ variation in outcomes that was previously unexplained. Given that psychologists remain uncertain regarding the ultimate roots of gender differences in personality – the two primary contenders being a broadly evolutionary explanation and a broadly social one (Eagly and Wood 1999) – we might interpret differences as reflecting some inherent qualities of women or, perhaps more likely, as reflecting broader patterns of gendered socialization that start at birth. In reality, the balance is probably to be found in some combination of the two and, for our purposes, the ultimate root of any exhibited differences is somewhat beside the point. Understanding the source of differences might, admittedly, affect the kinds of policy response we recommend to ameliorate women’s persistent under-representation but, in the first instance, such an analysis is not necessary to explore the role of personality in shaping it.

Of course, there is more to the study of personality than the Big Five. Julie Blais and Scott Pruyers (2018; Pruyers and Blais 2017, 2018a, 2018b) have examined a range of other traits including the Dark Triad of narcissism, Machiavellianism, and psychopathy. Their findings suggest that there is a distinction of sorts between how personality affects levels of interest in running for and holding office and the question of how one perceives one's qualifications to do so - that these are two separate processes (Blais and Pruyers 2018). Interestingly, while general measures of personality such as the Five Factor Model were associated with the former, the so-called 'Dark measures' were associated with the latter.

Using the Big Five, others have examined the role of personality in progressive ambition – instances where incumbent legislators consider whether to run for higher office – with mixed results (Dietrich et al. 2012; Allen and Cutts 2017). As part of a broader study of personality traits among state legislators in Arizona, Maine, and Connecticut, Dietrich et al. found that higher levels of Extraversion and Emotional Stability predicted greater levels of progressive ambition, even when controlling for sex (2012, p.206). Similarly, in a study of local legislators in London, Allen and Cutts find that legislators exhibiting higher levels of Emotional Stability are more likely to express progressive ambition (2017, p.5), though this effect is not a large one and is not robust to the inclusion of a full range of covariates. However, the fact that these studies, both deploying measures of the Five Factor Model of personality alongside a range of covariates drawn from the existing literature on political ambition, sample only incumbent legislators is likely to result in less variation in personality among this group given the already substantial filtration process through which they have passed. In reality, making it into even local political office is going to act as a huge selection effect and, based on what we know about personality and low-level political participation, we should expect part of this effect to be about personality (Mondak 2010). This is a point underlined by recent findings from Adam M. Dynes et al's (2019) study of both a representative population sample as well as a sample of individuals who are already public officials. They find that the personality traits predicting nascent ambition differ from (and exert a stronger effect than) those predicting progressive ambition for higher office (Dynes et al. 2019). Specifically, among the population, 'those with higher levels of extraversion and openness to experience are more likely to express an interest running for public office in the future, while those with higher levels of agreeableness and conscientiousness are less likely to do so' (Dynes et al. 2019, p.312). Among incumbent public officials, increased extraversion and openness are related to greater interest in running for higher office, as is increased emotional stability, while 'public officials with higher levels of agreeableness are less likely than those with low levels of agreeableness to express interest in running for public office as the likelihood of winning higher office increases' (Dynes et al. 2019, p.312). This is also demonstrated in the work of Alice H. Eagly and Linda L. Carli (2007), who highlight how women who succeed in navigating the 'labyrinth' of organisational hierarchy are required to exhibit different traits and capabilities at different stages of the hierarchy, a process that appears to be deeply gendered.

To some extent, however, this recent research examining how personality and other traits may affect ambition remains separate from existing research focused more on socio-economic explanations of the gender gap. Primarily, this is a result of how the data of a more psychological bent used in ambition research has been collected. For the most part, unrepresentative samples are used, as are convenience samples of groups such as undergraduate students. Although not an issue when exploring specified mechanisms, for example, this limits the ability that this research has to comment on more general patterns of political ambition. As discussed by Crowder-Meyer and Lauderdale (2014, p.1), actual candidates are largely drawn from a pool of 'highly educated individuals in their late 40s, employed in fields with high occupational prestige'. Concomitantly, much of this research does not include statistical

controls for established socio-economic explanations of the gender gap in political ambition. So, for example, the extent to which an individual was raised within a political family is not included in personality-focused ambition research. Consequently, as of yet we have only a limited understanding of how personality ranks alongside these other variables as explanations of the gender gap in political ambition. As Blais and Pruyers (2018, pp.170-1) note,

Future studies on nascent political ambition and personality should consider broadening the sample to ... a more general community sample. Relatedly, future studies should also control for additional demographic variables beyond gender such as socio-economic status as well as variables such as political knowledge, interest, and efficacy.

Here, we seek to answer this call. We begin by outlining how we are able to do this, using original and unique data, before turning to descriptive and regression analyses respectively.

Data

We analyse original large-N data ($N=10,206$) collected in conjunction with YouGov from a British online panel in April 2017. Responses were weighted in line with normal YouGov procedures to produce a nationally-representative sample.¹ Our dependent variable is constructed from a series of three questions, all linked dependent on response. The first of these asked respondents whether they had ever considered running for political office. If they responded negatively, they were asked whether they thought they might consider it in future. If they responded affirmatively, they were first asked whether they had taken any action towards running for office and then, secondly, whether they had actually done it. Full details are provided in the Appendix.

We analyse political ambition in two stages in a similar manner to existing research (Allen and Cutts; 2017; Lawless and Fox, 2010; Maestas et al. 2006). Firstly, we distinguish between those respondents who expressed political ambition – combining those who would consider it in the future; are considering running for office but not taken action; and those who have taken action – and respondents who had no intention of standing for office. Secondly, we focus only on those with political ambition by comparing those who might consider running in the future, those who have some intention of seeking higher office and those who had actually done so. Turning to some initial descriptive analysis, just over 10 per cent of British citizens had considered running for higher office. Of those with political ambition, around 38 per cent had expressed an intention to run and had actively considered standing while a further 18 per cent had taken some action towards actually doing so. Around 44 per cent stated they would rule out standing for office now but would actively consider it in the future.

Alongside sex, our other key variables of interest are measures of the FFM. To assess self-placement by respondents on each trait, we use the standard Ten Item Personality Inventory (TIPI) widely adopted when measuring the Big Five (Gosling et al. 2003). As the original authors of the TIPI items note, despite their brevity ‘the instruments reached adequate levels in terms of (a) convergence with widely used Big-Five measures in self, observer, and peer reports, (b) test-retest reliability, (c) patterns of predicted external correlates, and (d) convergence between self and observer ratings’ (Gosling et al. 2003). Ten-item survey batteries

¹ Data is weighted on the basis of age, gender social class, region, party identity, internet access and newspaper readership to ensure it is nationally representative.

have additionally been used by political scientists in the past (Mondak 2010, p.75). We use our data to address three main research questions:

RQ₁ – how, if at all, is the longstanding and established sex effect in nascent (initial) ambition affected by the inclusion of personality measures when modelling political ambition and other factors are taken into account.

RQ₂ - does displaying certain personality traits have differential effects for men and women – do these ‘work’ differently depending on sex?

RQ₃ - do sex and personality traits have differential effects at different stages of the ambition process?

As noted above, we include a number of control variables in our analysis in addition to our measures of the FFM. These are drawn from the existing literature, namely the comparable studies and samples of Lawless and Fox (2005, 2010) and, together with the sex variable, constitute what might be considered the canonical predictors of political ambition across the population. These fit into seven broad categories. First, socio-demographic controls for age, social class, marital status, and employment status among others. Second, education level. Third, the early-life political socialisation of an individual. Fourth, the extent to which an individual feels politically efficacious and able to exert political influence. Fifth, the extent to which an individual is motivated to hold political office in search of a sense of personal achievement and, sixth, the extent to which an individual is motivated to hold political office as a way of achieving some other external outcome in ideological or policy terms. Finally, we account for the extent to which an individual perceives injunctive norms in their social network – that is, the extent to which they feel that people who are close to them would approve of them becoming more involved in politics and of them seeking political office.²

Sex, Personality and Political Ambition: A Descriptive Profile

Figure 1 provides a descriptive breakdown of political ambition and our three categories of ambition by sex. It suggests that there are clear sex differences. Of those respondents who expressed political ambition, just under two thirds were men. We can summarise the relationship between sex and overall ambition (specified as separate nominal or dichotomous variables) by running cross-tabulations and reporting chi-square and Cramer’s V statistics. Given the visible sex differences in Figure 1, it is unsurprising that the Pearson chi-square statistic is 239.19 (p-value of 0.000) and a Cramer’s V of 0.15 (p-value 0.000) which indicates a fairly strong association between sex and overall ambition. Simply put, when compared with the average, men are significantly more likely to be considering or actively seeking to stand for political office. Only a third of those who had taken action to stand for office were women. A similar split existed among those who were currently thinking of running. Slightly more than two fifths of those who would consider standing for political office in the future were women. So while this category contained more women the general trend – clear sex differences – remained. Again we find similar significant associations between sex and these different ambition categories which substantiate the visual evidence.³

² We provide a full description of the variables used in Table A3 in the appendix.

³ There were significant associations between sex and consider later (chi-square = 54.02, p<.001; Cramer’s V = 0.07, p<.001); actively considering now (chi-square = 105.96,

Turning to how the FFM of personality is associated with political ambition, we can identify some clear relationships between exhibiting certain personality traits and holding an interest in running for political office.⁴ We find that individuals exhibiting higher levels of Openness to Experience are more likely to have considered running for political office as are individuals scoring higher on measures of Emotional Stability and Extraversion. Conversely, those exhibiting greater levels of Conscientiousness and Agreeableness are less likely to have considered a run. Full statistical details of these associations are included in Footnote 3.

Examining how personality traits exhibit by sex among those who are politically ambitious (see graphs in Figure 2), we can detect some initial patterns suggesting that personality effects are not identical, or even consistent in a broader sense, across both men and women. While we see fairly similar distributions across the sexes in terms of Conscientiousness and Emotional Stability, there are slightly greater concentrations at lower levels of both Openness to Experience and Agreeableness among men. Finally, and most notably, Extraversion sees a far greater concentration at higher levels among women than among men, consistent with existing findings.

Modelling Political Ambition

Do sex differences on political ambition hold when other factors are taken in account? How important are personality traits? Are women with certain personality traits more likely to stand or consider standing for public office? Or do other factors explain why some individuals show greater progressive political ambition in Britain than others? In order to address these key questions, we run a number of regression models. First, we use a binomial logistic regression model of political ambition in Britain to contrast those who expressed ambition against those who have ruled out actively seeking to stand (see Table 1 below).

Here, we run four models: Model 1 includes just sex and our measures of the FFM. Model 2 includes our key variable of sex and explores whether an effect indicative of a gender gap in political ambition still holds after controlling for established drivers of political ambition including socio-demographic variables – age, class, education, marital status, employment status - early-life political socialization in the home, growing up in a political family and the division of domestic and caring labour in addition to measures of the FFM. Model 3 explores whether these sex and personality effects remain once measures of achievement motivation, political system efficacy, outcome motivation and approval from those close to the respondent (injunctive norms) are taken into account (see the Appendix for the breakdown of questions used and how they were operationalized in the models). Addressing our second main research

$p < .001$; Cramer's $V = 0.10$, $p < .001$) and taken action categories (chi-square = 55.93, $p < .001$; Cramer's $V = 0.07$, $p < .001$).

⁴ There were significant associations between extraversion and overall ambition (chi-square = 189.05, $p < .001$; Cramer's $V = 0.14$, $p < .001$, Gamma 0.19, $p < .001$); Agreeableness and overall ambition (chi-square = 64.96, $p < .001$; Cramer's $V = 0.08$, $p < .001$; Gamma - 0.12; $p < .001$) Conscientiousness and overall ambition (chi-square = 37.47, $p < .001$; Cramer's $V = 0.06$, $p < .001$; Gamma -0.06; $p < .001$); Emotional stability and overall ambition (chi-square = 68.19, $p < .001$; Cramer's $V = 0.08$, $p < .001$; Gamma 0.09; $p < .001$) and openness and overall ambition (chi-square = 265.90, $p < .001$; Cramer's $V = 0.16$, $p < .001$; Gamma 0.25; $p < .001$).

question, Model 4 includes interactions between the personality measures and respondent gender, to test whether the effect of personality traits and other variables on political ambition are different for women than for men. Any insignificant findings for these interaction terms would suggest that the personality and other variables that predict women's likelihood of standing for office also predict men's.

Second, we use a multinomial logistic regression to examine political ambition in greater depth. Here we contrast this least immediately ambitious group - those who would consider running in the future but not now - against those who are actively considering now but have not yet acted on it and those individuals who have taken action.⁵ These models are reported in Table 2 and contain the same variables as used in Model 3 in Table 1 above. The fit of these models is assessed using standard goodness-of-fit measures including the log-likelihood and the Akaike Information Criterion (AIC) and in all cases these operate in the expected direction with reductions in both from Model 1 to 3 in Table 1. To aid interpretation of the results, we use odds ratios and, for the key findings, convert these to predicted probabilities.

Our data provides clear evidence of sex differences in political ambition both at the bivariate level and in multivariate models when other factors are controlled for. Simply put, women remain significantly less likely to run for political office in Britain than men even once personality differences are taken into account. To ease interpretation, we estimate the discrete change on the probability for each of the values averaged across the observed values. We report these average marginal effects of a one-unit change in terms of probability changes for each predictor for key predictors that are significant at the 5 per cent confidence level from Model 3 in Table 1 below.⁶ Focusing on the logistic model with no interactions (Table 1 Model 3), on average, the probability of women being politically ambitious in Britain is eight percentage points lower than men.

Crucially, although they do not eliminate a sex effect, personality traits do also drive political ambition. It seems that Extraverts are less daunted by the prospect of standing for office while

⁵ Initially we contemplated using an ordinal logistic regression. However, during testing of the model we found that it violated the proportional odds/parallel lines assumption. Gologit and Gologit2 options were examined but concerns around the unconstrained model not requiring ordinality; estimated probabilities can go negative; interpretation difficulties etc. we decided instead to opt for the conventional multinomial logistic model. Here we tested the assumption of independence of irrelevant alternatives (IIA) using various tests – Hausman; Small-Hsiao tests etc. We found no violations of the IIA assumption. All results relating to these tests are available on request from the authors. More broadly, it is important to note that theoretically ambition measures are dependent on one another yet it is commonplace for ambition questions to be asked of subsets of survey respondents. This is common problem with questionnaire design and the standard way in which ambition is measured. We highlight this (and thank an anonymous reviewer for also noting this) to stress that a better measure is needed in order to capture progressive ambition in a robust manner.

⁶ We calculate the baseline probability of expressing political ambition where all predictor variables are set on their empirical mean. The predicted probability equals 11.6 percentage points. We use this to examine the impact of each predictor because we can now compare the respective effect to the baseline probability.

those individuals who score higher levels of Openness to Experience are also significantly more likely to express political ambition. Even when we take account of additional drivers such as outcome and achievement motivations, approval and political system efficacy, being higher in Extraversion or Openness to Experience increases the probability of standing for public office by one and three percentage points respectively. In both cases, it is unsurprising that individuals with these traits see the prospect of seeking office an attractive proposition. Conversely, individuals with high levels of Agreeableness or Conscientiousness are significantly less likely to run for political office. Both of these fit with expectations as agreeable individuals would seek to avoid conflict at all costs and are probably not suited to the scrutiny, polarising discourse and level of disagreement which is a mainstay of British political life. Likewise, more conscientious individuals think carefully before making decisions, are loss averse and undoubtedly would weigh up the costs of seeking office and the probability of winning. When combined together it is likely – as indicated in our data – individuals would on balance be less inclined to run for political office. Given previous evidence, it is also unsurprising that in Model 1 we find those who exhibit traits of emotional stability have a greater interest in standing for office, however once additional potential drivers are controlled for this fails to remain a significant influence.

Insert Table 1

Insert Figure 3 (AMEs from Model 2 Table 1)

Of the remaining predictors, well-established drivers of political ambition exerted significant influence. Based on the results from Model 2, individuals who express political ambition are significantly less likely to be working class or in full time employment while those with professional qualifications or degrees are more than two times more likely to stand for public office. The probability of seeking office increased by nine percentage points for those with degrees or professional qualifications respectively and by five percentage points for individuals with post-secondary qualifications when compared with the base category no qualifications. As expected, having a politicised upbringing through parents or the wider family structure increased the probability of standing for office by three percentage points. Lastly, both outcome and achievement motivation are significant drivers. Those who stress the importance of their own political beliefs, tell other people, live their life in accordance and are involved in activities that communicate their political beliefs are 1.6 times more likely to seek public office. Similar effects exist for those who power matters to them, like the thought of being influential and feel that being a politician would bring personal fulfilment – classified as achievement motivation. On average, both increase the probability of seeking office by six percentage points. Those individuals who question whether anything changes whatever party is in power are less likely to express political ambition. However, approval from those who care most and are close to you also drives political ambition, increasing the probability of standing by six percentage points.

Turning to the interaction between gender and personality, Model 3 in Table 1 presents a fully specified model with the interaction terms. Due to the inclusion of interaction terms, the coefficient and AMEs associated with the sex variable is not an accurate reflection of the gender gap in political ambition. However, interacting sex with personality traits, approval and outcome motivation does allow us to assess the joint effects of the key components and the interaction term holding other variables constant. Earlier we highlighted studies that have found considerable differences in trait exhibition by sex so it makes sense to test whether this holds

for political ambition. Given structural barriers and gendered socialization variables such as caring responsibilities, we might expect support from those close to them may matter more for women than men. Similarly, women who express strong beliefs and engage more widely in communicating these beliefs may feel more empowered to stand for public office and be less perturbed by the gender barriers and costs of seeking office. Our findings are reported in Model 3 and the AMEs are shown in Figure A1). Only two interactions are significant and both are positive. The negative main effect for sex holds and suggests that women are less likely, all things being equal, to express political ambition than men. But the positive interaction term with extraversion and outcome motivation suggests when either is greater (individuals become more extraverted or internalised outcome motivation increases) the difference (in terms of odds) between women and men gets smaller. We demonstrate this effect by calculating the predictive margins and then plotting the results (see Figures 4 and 5 below).

Figures 4 and 5

Sex, Personality and Political Ambition

Among those who express political ambition, are women still less likely than men to have either considered standing or taken action to seek political office? Are personality traits key at different stages of the ambition process after accounting for other potential drivers? What influences individuals to ultimately take action and stand for parliament? We address these questions using a multinomial logistical regression. As noted before, we use the same format and predictor variables with the key findings presented in Table 2. Again we report the average marginal effects to fully assess the influence of these variables (Figure 6).⁷

In our multinomial regression, the weaker expression of political ambition – where an individual would consider running for office at a later date but not now – is used as the base category. Evidence from earlier descriptive analysis suggested that more women were in this category of ambition than the considering running and taken action alternatives.⁸ As a consequence, we expect a negative relationship between sex and these ambition categories. But do these hold when other predictors are added?

Our evidence suggests it does: women are significantly less likely than men to have considered running for office and have taken action when compared against the base category.⁹ There is

⁷ The baseline probabilities when all independent variables are set at their empirical mean are as follows: considering standing later but not now 45 percentage points; Considering standing 39 percentage points; Taken action 16 percentage points

⁸ This is substantiated by a logistic regression (see appendix Table A1) which compares this weaker category against the other two ambition categories. Here we find that women were 1.4 times more likely than men to consider running for office later but not now even when holding other variables constant.

⁹ If you contrast those currently considering standing against those who have taken action then you find no evidence of a sex effect. Similarly, only conscientiousness (negative) is significant of the Big five personality traits. Sex is a crucial determinant of whether individuals move from considering standing but not now to actively seeking office. If one

little evidence that personality traits are important for those who are considering standing and those who have taken action. Only conscientious individuals are significantly less likely to have taken action. The probability of conscientious individuals having taken action and stood for office is two percentage points lower than the base category. Other factors seem to be driving progressive ambition. The older you are the more likely you are to have taken steps to seek election to parliament. Having a political upbringing, specifically primarily the political influence of one's wider family outside of just parents, increases the probability of having stood for office by seven percentage points. Both approval and outcome motivation increase the probability of taking action by two and three percentage points respectively. While the probability of standing for office is on average one percentage point higher for those individuals who believe that parties and politicians can change things as opposed to those who think whatever party is in power nothing changes.¹⁰ All other variables such as early-life political exposure and socialization in the home, class and education alongside the majority of personality traits are insignificant. Simply put, it seems that these factors may not explain acting on ambition in Britain but are more influential in determining why individuals may express political ambition in the first place.

Insert Table 2; Insert Figure 6 (AMEs)

Conclusion

The study of political ambition has begun to take note of the role of personality as a potential driver of ambitious intent and action. However, this has often taken place in isolation from the broader study of political behaviour that analyses larger, more representative samples and controls for a wide range of canonical socioeconomic predictors. In this paper we bring these two approaches together for what, to the best of our knowledge, is the first time, using original large-N data collected from a British population sample.

We addressed three main research questions. First, how does the inclusion of measures of the FFM of personality alongside traditional socio-economic predictors of political ambition affect the longstanding gender gap highlighted in almost all of these models? We found that, although personality has a clear role in driving the consideration of running for office above and beyond these other factors (suggesting that it should be included in all future research in this area), it does little to reduce or eliminate the prominence and persistence of the sex effect. In other words, the gender gap in initially considering running for office (nascent ambition) is robust to the inclusion of measures of personality alongside traditional socioeconomic predictors of political ambition.

Our second question asked whether the influence of personality differed for men and women. To put it another way, does personality 'work' in different ways dependent on sex? To test this,

thinks of conscientiousness as persistence, this makes some sense. It also influences whether individuals express political ambition in the first place. Personality also drives ambition in the first instance – whether an individual expresses ambition or not – but is not a major influence on whether one decides to take action or not.

¹⁰ A table of AMEs for significant variables across all categories are included in the appendix (Table A2).

we included interaction effects in our full regression model and found that one FFM trait, Extraversion, seems to have a different effect on levels of political ambition among women than it does among men. Effectively, while having higher levels of Extraversion doesn't affect political ambition among men, an increase in Extraversion among women to the level found among men does make a difference. In other words, being an especially extraverted woman makes you more likely to have considered running for office while this doesn't matter for men – something that reinforces the findings of Eagly and Carli (2007) and raises further questions around whether increased exhibition of this trait will affect the propensity of a woman to be recruited by political actors, echoing Oliver and Conroy (2018).

Third, did we observe similar personality and sex effects for progressive ambition when other potential drivers were taken account? We found that, when breaking down the political ambition process into an intention to run and actually doing so, personality exerts minimal influence in sorting among those who are already politically ambitious – personality is not the thing that causes someone to move from intending to run for office to actually doing so.

Our findings suggest that, while personality is not a panacea for scholars of political ambition or the gender gap therein, it does enhance our understanding of the processes by which some citizens end up running for public office while others do not. Consequently, we recommend that future large-N studies take full account of personality alongside traditional socioeconomic predictors and that political ambition questions become a staple of long running panel datasets so that we can understand the causal drivers and mechanisms behind why (and why not) individuals think about standing and actively decided to seek public office. However, while acknowledging that personality has some role, it should also be emphasised once again that the important, if less exciting and glamorous, work of studying social influences and political institutions would seem to still bear more fruit when it comes to understanding the gender gap in political ambition.

References

- Allen, P., 2013. Gendered Candidate Emergence in Britain: Why are More Women Councillors Not Becoming MPs?. *Politics*, 33(3), pp.147-159.
- Allen, P. and Cutts, D., 2017. Aspirant candidate behaviour and progressive political ambition. *Research & Politics*, 4(1), p.2053168017691444.
- Allen, P. and Cutts, D., 2018. An Analysis of Political Ambition in Britain. *The Political Quarterly*, 89(1), pp.73-81.
- Blais, J. and Pruyssers, S., 2017. The power of the dark side: personality, the dark triad, and political ambition. *Personality and Individual Differences*, 113, pp.167-172.
- Clarke, N., Jennings, W., Moss, J. and Stoker, G., 2018. *The good politician: Folk theories, political interaction, and the rise of anti-politics*. Cambridge University Press.
- Costa Jr, P.T., Terracciano, A. and McCrae, R.R., 2001. Gender differences in personality traits across cultures: robust and surprising findings. *Journal of personality and social psychology*, 81(2), p.322.

- Crowder-Meyer, M. and Lauderdale, B.E., 2014. A partisan gap in the supply of female potential candidates in the United States. *Research & Politics*, 1(1), p.2053168014537230.
- Dietrich, B.J., Lasley, S., Mondak, J.J., Remmel, M.L. and Turner, J., 2012. Personality and legislative politics: The Big Five trait dimensions among US state legislators. *Political Psychology*, 33(2), pp.195-210.
- Dynes, A.M., Hassell, H.J. and Miles, M.R., 2019. The personality of the politically ambitious. *Political Behavior*, 41(2), pp.309-336.
- Eagly, A.H. and Wood, W., 1999. The origins of sex differences in human behavior: Evolved dispositions versus social roles. *American psychologist*, 54(6), p.408.
- Eagly, A.H. and Carli, L.L., 2007. *Through the labyrinth: The truth about how women become leaders*. Harvard Business Press.
- Gerber, A.S., Huber, G.A., Doherty, D., Dowling, C.M. and Ha, S.E., 2010. Personality and political attitudes: Relationships across issue domains and political contexts. *American Political Science Review*, 104(1), pp.111-133.
- Gerber, A.S., Huber, G.A., Doherty, D. and Dowling, C.M., 2011. The big five personality traits in the political arena. *Annual Review of Political Science*, 14.
- Gosling, S. D., Rentfrow, P. J., & Swann, W. B., Jr. (2003). A Very Brief Measure of the Big Five Personality Domains. *Journal of Research in Personality*, 37, 504-528.
- Kanthak, K. and Woon, J., 2015. Women don't run? Election aversion and candidate entry. *American Journal of Political Science*, 59(3), pp.595-612.
- Kenny, M., 2013. *Gender and political recruitment: Theorizing institutional change*. Springer.
- Lawless, J.L. and Fox, R.L., 2005. *It takes a candidate: Why women don't run for office*. Cambridge University Press.
- Lawless, J.L. and Fox, R.L., 2010. *It still takes a candidate: Why women don't run for office*. Cambridge University Press.
- Maestas, C.D., Fulton, S., Maisel, L.S. and Stone, W.J., 2006. When to risk it? Institutions, ambitions, and the decision to run for the US House. *American Political Science Review*, 100(2), pp.195-208.
- McCrae, R.R. and Costa, P.T., 2003. *Personality in adulthood: A five-factor theory perspective*. Guilford Press.
- McDermott, M.L., 2016. *Masculinity, femininity, and American political behavior*. Oxford University Press.

- Mondak, J.J., 2010. *Personality and the foundations of political behavior*. Cambridge University Press.
- Norris, P. and Lovenduski, J., 1995. *Political recruitment: Gender, race and class in the British Parliament*. Cambridge University Press.
- Oliver, S. and Conroy, M., 2018. Tough enough for the job? How masculinity predicts recruitment of city council members. *American Politics Research*, 46(6), pp.1094-1122.
- Pruysers, S. and Blais, J., 2018a. A Little Encouragement Goes a (not so) Long Way: An Experiment to Increase Political Ambition. *Journal of Women, Politics & Policy*, 39(3), pp.384-395.
- Pruysers, S. and Blais, J., 2018b. Narcissistic Women and Cash-Strapped Men: Who Can Be Encouraged to Consider Running for Political Office, and Who Should Do the Encouraging?. *Political Research Quarterly*, p.1065912918786040.
- Schneider, M.C., Holman, M.R., Diekman, A.B. and McAndrew, T., 2016. Power, conflict, and community: How gendered views of political power influence women's political ambition. *Political Psychology*, 37(4), pp.515-531.
- Shames, S.L., 2017. *Out of the running: Why millennials reject political careers and why it matters*. NYU Press.
- Weisberg, Y.J., DeYoung, C.G. and Hirsh, J.B., 2011. Gender differences in personality across the ten aspects of the Big Five. *Frontiers in psychology*, 2, p.178.

Tables

Table 1: Logistic Regression model of Political Ambition

Variables	Model 1 β SE	Model 2 β SE	Model 3 β SE	Model 4 β SE
Constant		-2.53* 0.25	-3.58* 0.30	-3.34* 0.36
<i>Socio-Demographic</i>				
Female	-0.79* 0.06	-0.86* 0.06	-0.67* 0.06	-1.28* 0.47
Age	-	-0.01* 0.00	-0.00 0.00	-0.00 0.00

Working Class	-	-0.29* 0.06	-0.16* 0.07	-0.15* 0.07
Married	-	-0.02 0.06	-0.00 0.07	-0.00 0.07
Non White	-	-0.18 0.14	-0.30 0.16	-0.29 0.16
Carer	-	0.18* 0.07	0.20* 0.07	0.20* 0.07
Full Time Employment	-	-0.21* 0.06	-0.14* 0.06	-0.14* 0.06
Education (Base = No Quals)				
Secondary& Below	-	0.20 0.16	0.19 0.16	0.19 0.16
Post-Secondary	-	0.52* 0.16	0.40* 0.16	0.41* 0.16
Professional Quals	-	0.78* 0.16	0.74* 0.16	0.74* 0.16
Degree (UG & PG)	-	0.97* 0.16	0.78* 0.16	0.77* 0.16
DK/Not Say Education	-	0.43* 0.21	0.34 0.21	0.35 0.21
Political Socialization				
Parents	-	0.48* 0.08	0.30* 0.08	0.30* 0.08
Other Family	-	0.47* 0.07	0.26* 0.08	0.25* 0.08
Personality Big Five				
Extraverted	0.17* 0.02	0.18* 0.02	0.07* 0.02	0.01 0.03
Agreeableness	-0.15* 0.03	-0.13* 0.03	-0.10* 0.03	-0.10* 0.04
Conscientiousness	-0.09* 0.02	-0.07* 0.03	-0.10* 0.03	-0.09* 0.04
Emotionally Stable	0.05* 0.02	0.05* 0.02	0.03 0.02	0.00 0.03
Openness	0.36* 0.03	0.30* 0.03	0.24* 0.03	0.26* 0.04
Political System-Efficacy				
Nothing Changes	-	-	-0.10* 0.03	-0.10* 0.03
Achievement				
Achievement Motivation	-	-	0.49* 0.03	0.49* 0.03
Outcome				
Outcome Motivation	-	-	0.46* 0.03	0.38* 0.05
Care (Injunctive Norm)				
Approval	-	-	0.50* 0.04	0.49* 0.05
Interactions				
Female*Extraversion	-	-	-	0.13* 0.05
Female*Agreeableness	-	-	-	-0.01 0.06
Female*Conscientiousness	-	-	-	0.00 0.06
Female*Emotional Stability	-	-	-	0.07 0.05
Female*Openness	-	-	-	-0.07 0.06
Female*Outcome	-	-	-	0.21* 0.07
Female*Approval	-	-	-	0.03 0.07
Model Fit				
Chi-Square <0.05*	570.06*	890.76*	1345.73*	1335.78*
Log Likelihood	-4576.84	-4363.822	-3798.73	-3788.06
R ²	0.07	0.11	0.23	0.23
AIC	9167.67	8767.64	7645.45	7638.11
N	10206	10206	10206	10206

sig <0.05. Note: Bivariate relationship: Female -0.80 (0.05).

Table 2: Multinomial Logistic Regression of Political Ambition

Variables	Model 1 MLogit	Model 1 MLogit
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	β	SE	β	SE
Constant	-1.56*	0.55	-2.30*	0.70
<i>Socio-Demographic</i>				
Female	-0.29*	0.11	-0.41*	0.16
Age	0.01	0.00	0.04*	0.01
Working Class	0.08	0.12	-0.00	0.16
Married	0.08	0.12	-0.07	0.15
Non White	-0.34	0.27	0.08	0.33
Carer	-0.02	0.13	0.40*	0.16
Full Time Employment	-0.13	0.11	-0.30	0.16
<i>Education (Base = No Quals)</i>				
Secondary& Below	-0.01	0.36	-0.07	0.44
Post-Secondary	-0.03	0.36	-0.23	0.45
Professional Quals	0.18	0.36	0.15	0.44
Degree (UG & PG)	0.19	0.35	0.14	0.43
DK/Not Say Education	-0.00	0.44	-0.11	0.58
<i>Political Socialization</i>				
Parents	0.05	0.14	0.19	0.16
Other Family	0.19	0.14	0.59*	0.16
<i>Personality Big Five</i>				
Extraverted	-0.01	0.04	0.05	0.05
Agreeableness	-0.04	0.05	-0.09	0.06
Conscientiousness	-0.04	0.05	-0.20*	0.06
Emotionally Stable	0.03	0.04	0.01	0.06
Openness	0.09	0.05	-0.08	0.07
<i>Political System-Efficacy</i>				
Nothing Changes	0.09*	0.04	0.09*	0.04
<i>Achievement</i>				
Achievement Motivation	-0.11	0.06	0.03	0.08
<i>Outcome</i>				
Outcome Motivation	0.17*	0.06	0.32*	0.09
<i>Care (Injunctive Norm)</i>				
Approval	0.17*	0.06	0.26*	0.08
Model Fit				
Chi-Square <0.05*	239.11*		239.11*	
Log Likelihood	-1849.50		-1849.50	
R ²	0.06		0.06	
AIC	3795.00		3795.00	
N	1964		1964	

sig <0.05. Note: Model 1 multinomial logit: Base category: consider running later but not now. Bivariate relationship: (thought about taking action) - Female -0.24 (0.11); Bivariate relationship (Taken action) - Female -0.31* (0.13). No interactions with Female were significant either in the mlogit model.

Figures

Figure 1 – Breakdown of stages of ambition by sex (Overall N = 1964; Consider later N = 861; Consider now N = 742; Take action N = 361)

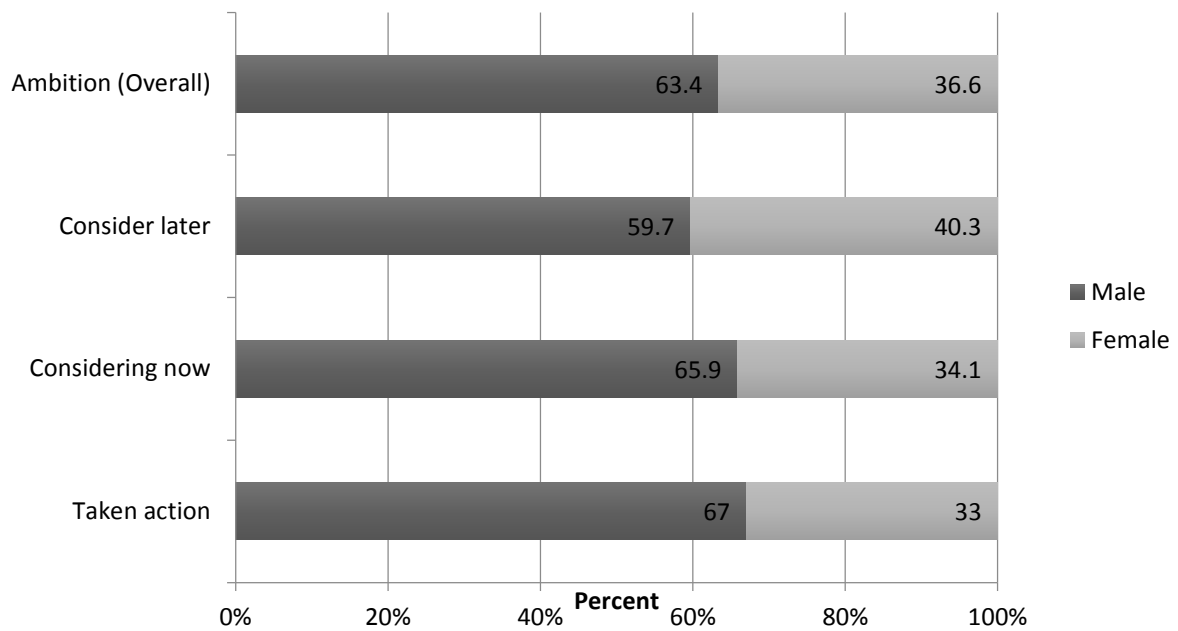
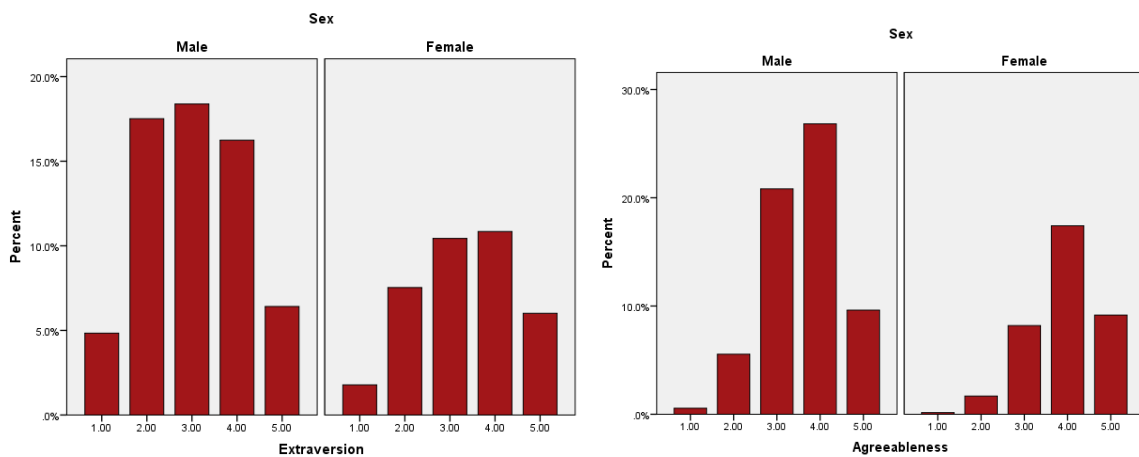


Figure 2: Ambition (all) by FFM Traits and by Sex



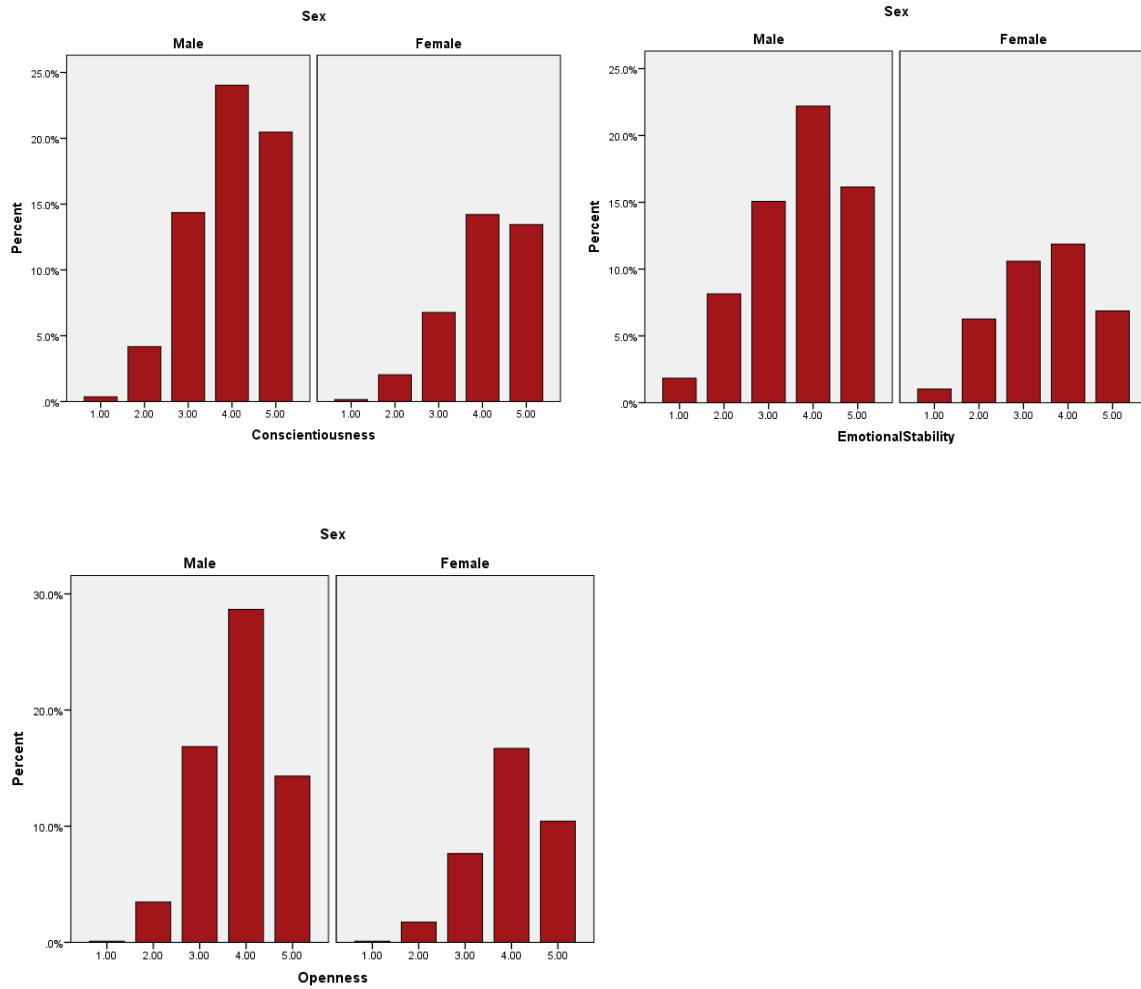


Figure 3: Average Marginal Effects of Significant Explanatory Variables of Ambition (from Model 2)

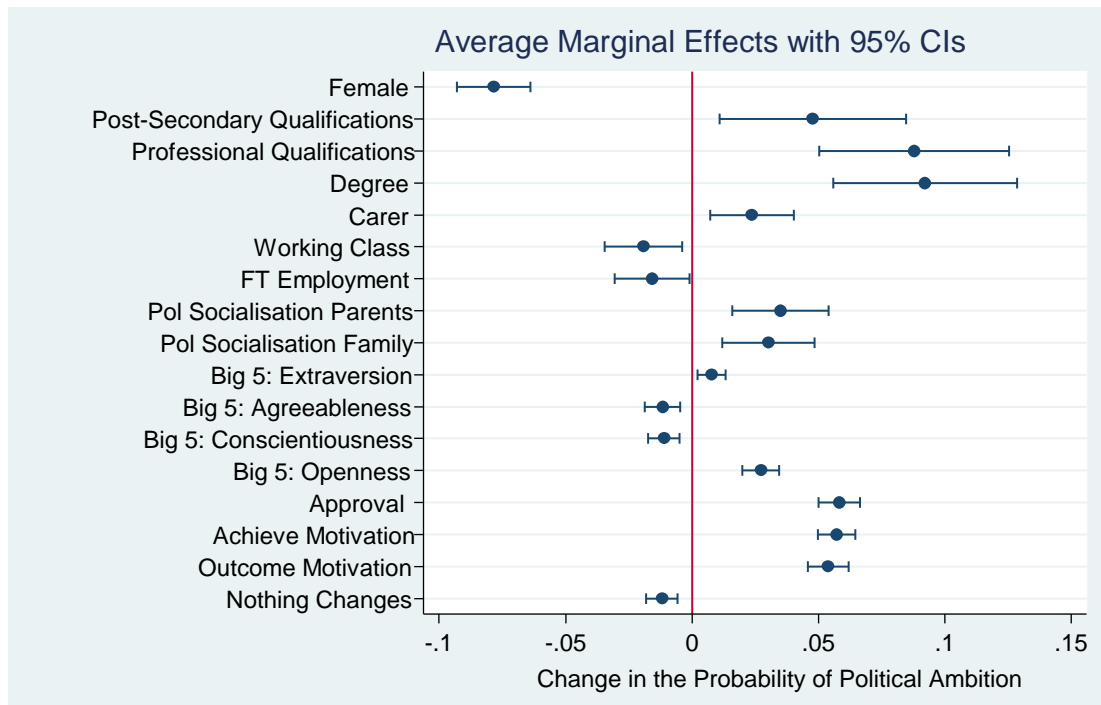


Figure 4: Predictive Margins of Female and Extraversion (Model 3; Table 1)

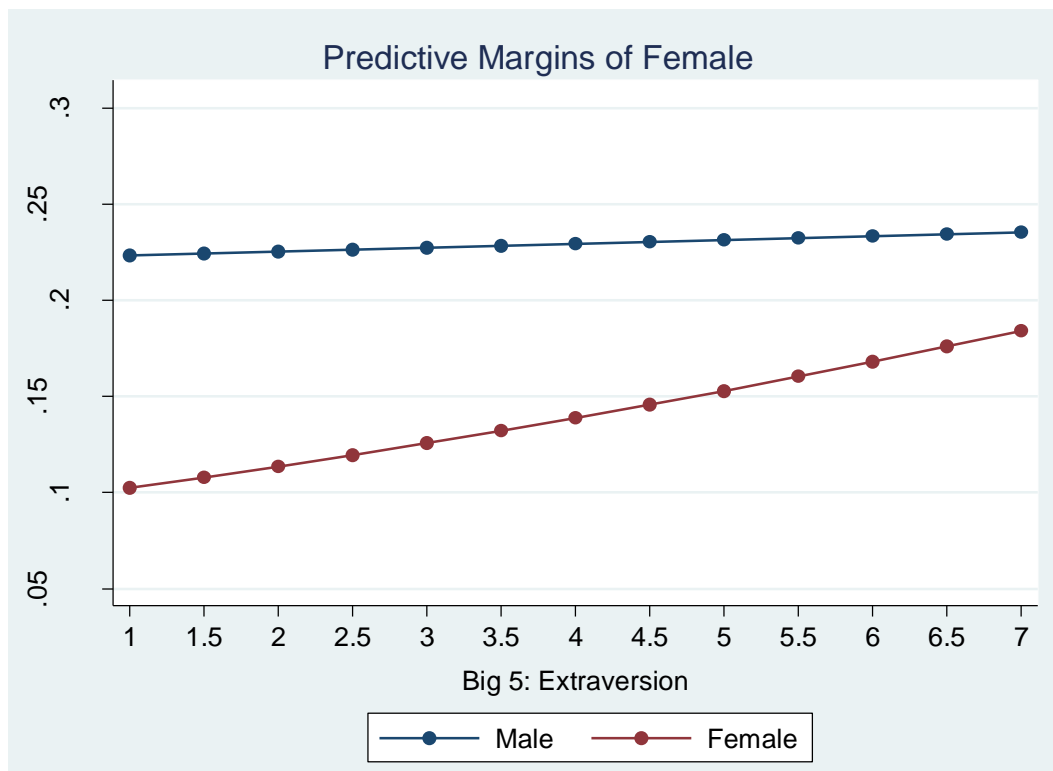


Figure 5: Predictive Margins of Female and Outcome Motivation (Model 3; Table 1)

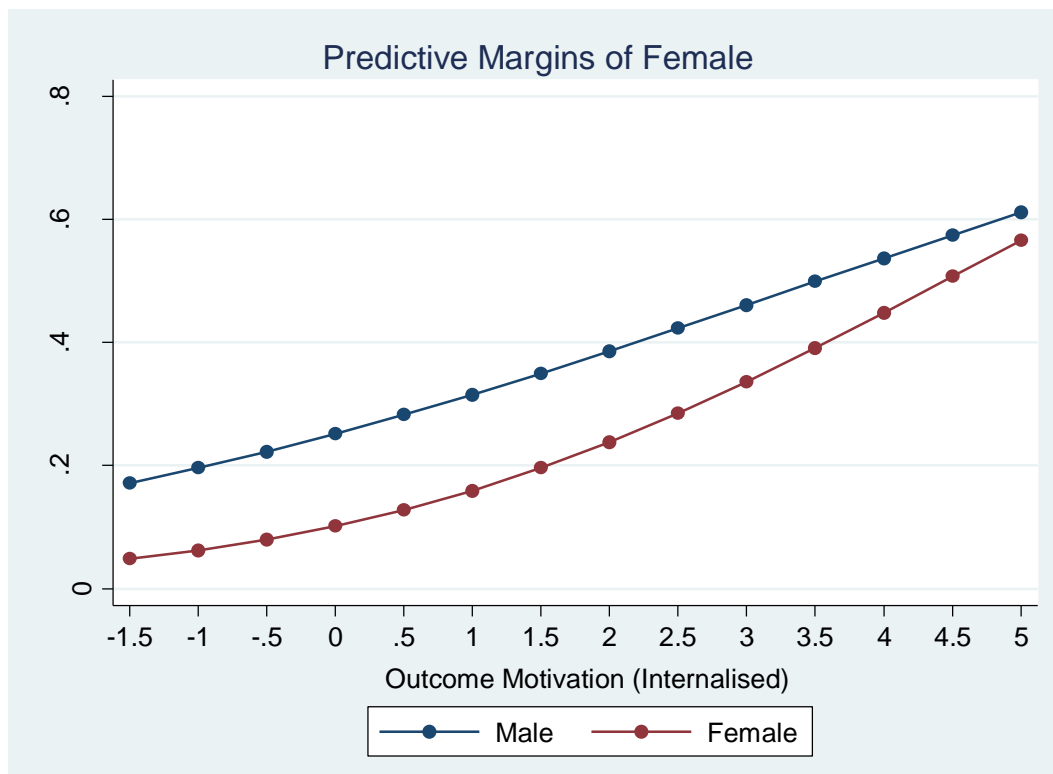
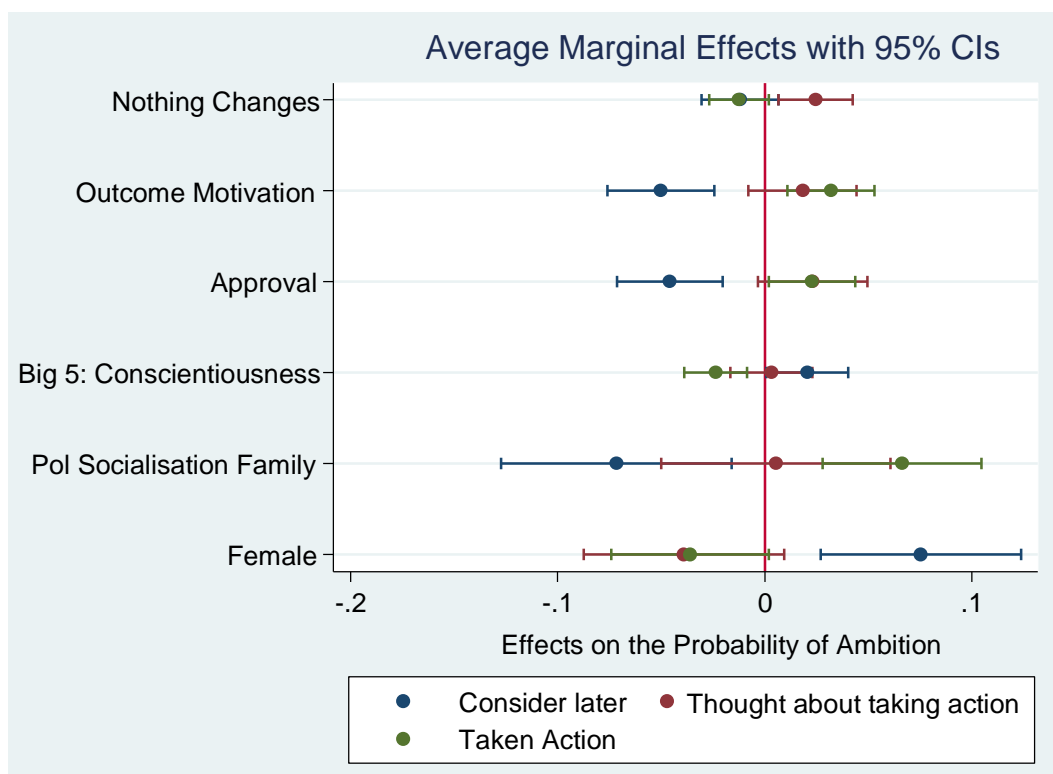
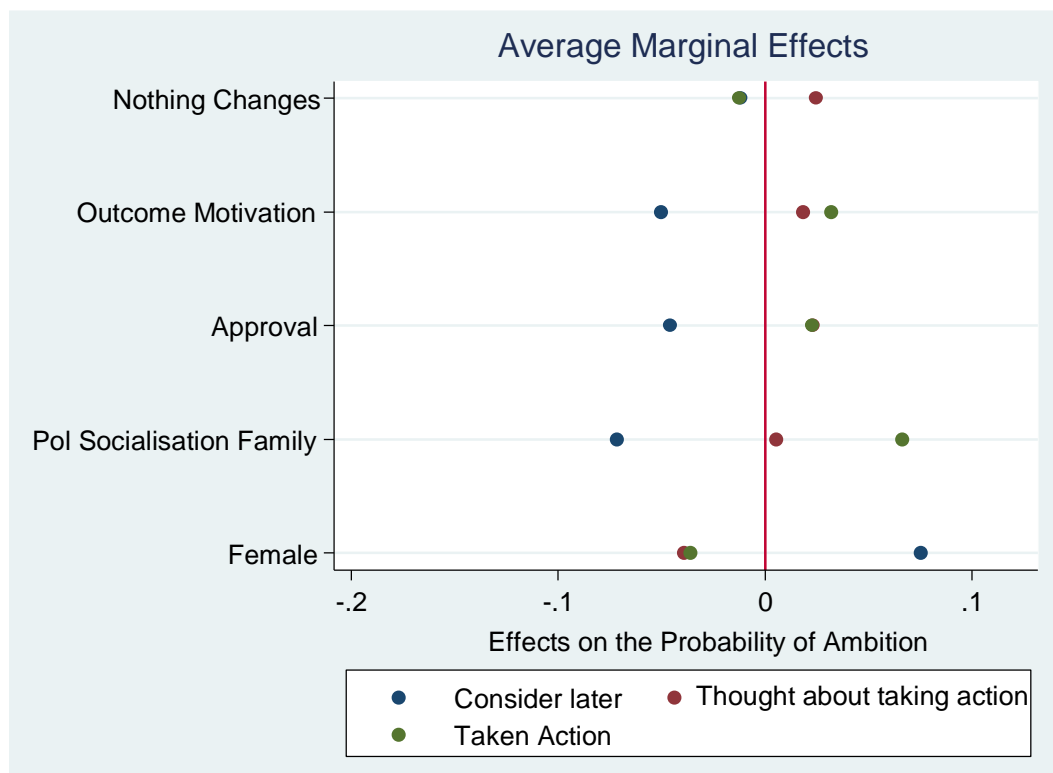


Figure 6: Average Marginal Effects of Significant Variables on Progressive Ambition



N.B. Figure 6 Alternative if the CIs look difficult to interpret



Appendix

Table A1: Logistic Regression Model of those who would consider running later but not now

Variables	Model 1 β SE
Constant	1.12* 0.50
<i>Socio-Demographic</i>	
Female	0.32* 0.11
Age	-0.02* 0.00
Working Class	-0.05 0.12
Married	-0.03 0.11
Non White	0.21 0.24
Carer	-0.11 0.12
Full Time Employment	0.18 0.10
<i>Education (Base = No Quals)</i>	
Secondary& Below	0.04 0.32
Post-Secondary	0.09 0.33
Professional Quals	-0.16 0.33
Degree (UG & PG)	-0.16 0.32
DK/Not Say Education	0.06 0.41
<i>Political Socialization</i>	
Parents	-0.09 0.13
Other Family	-0.33* 0.12
<i>Personality Big Five</i>	

Extraverted	-0.01 0.04
Agreeableness	0.06 0.05
Conscientiousness	0.09* 0.04
Emotionally Stable	-0.03 0.04
Openness	-0.04 0.05
Political System-Efficacy	
Nothing Changes	-0.05 0.04
Achievement	
Achievement Motivation	-0.07 0.05
Outcome	
Outcome Motivation	-0.22* 0.06
Care (Injunctive Norm)	
Approval	-0.20* 0.06
Model Fit	
Chi-Square <0.05*	121.12*
Log Likelihood	-1240.02
R ²	0.05
AIC	2528.04
N	1964

sig <0.05. Note: Model 1 Logit: Bivariate relationship - Female 0.26 (0.10). No interactions with Female were significant either in the logit model.

Figure A1: Average Marginal Effects of Significant Explanatory Variables of Ambition (from Model 3 including interaction effects)

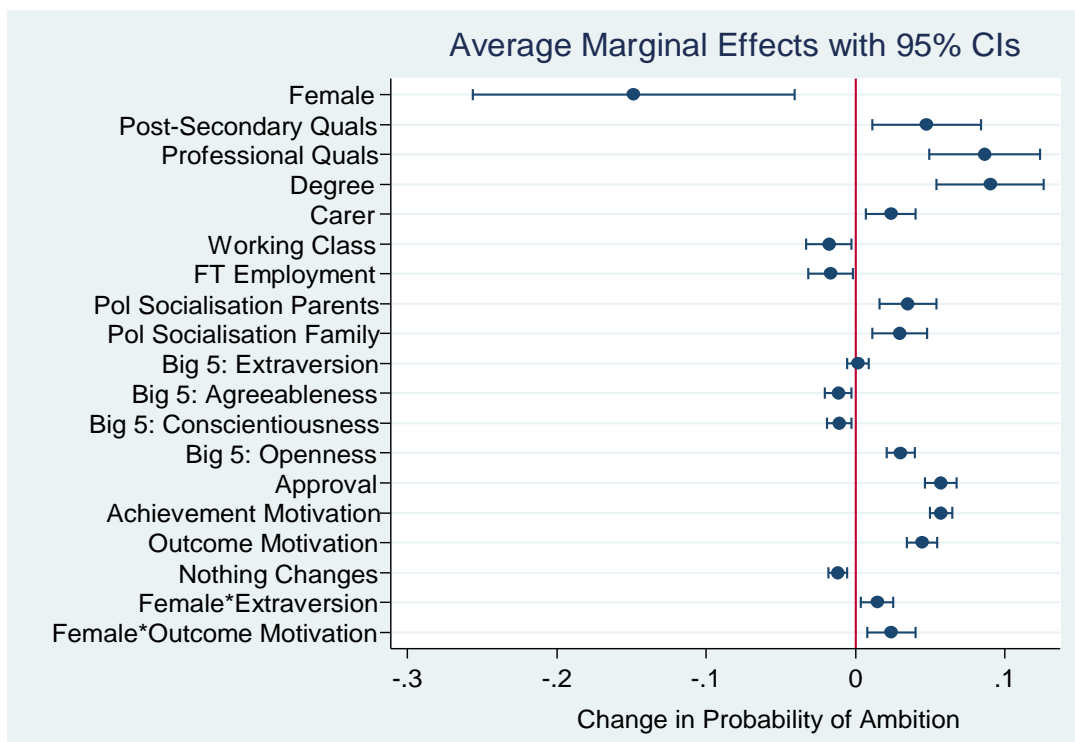


Table A2: Average Marginal Effects (including SEs and CIs) of Progressive Ambition - Significant Variables only from Table 2 Model 1 (Multinomial Logit)

Variables	Not Considering Now			
	dydx	SE	95% CIs	
Female	0.08	0.02	0.03	0.24
Age	-0.01	0.00	-0.01	-0.00
Carer	-0.02	0.02	-0.08	-0.03
Political Socialization Family	-0.07	0.03	-0.13	-0.02
Conscientiousness	0.02	0.01	0.02	0.00
Approval	-0.05	0.01	-0.07	-0.02
Outcome Motivation	-0.05	0.01	-0.08	-0.02
Nothing Changes	-0.01	0.01	-0.03	0.01
Variables	Considering Now			
	dydx	SE	95% CIs	
Female	-0.04	0.02	-0.09	0.01
Age	-0.00	0.00	-0.00	0.00
Carer	-0.03	0.03	-0.08	0.02
Political Socialization Family	0.01	0.03	-0.05	0.06
Conscientiousness	0.00	0.01	-0.02	0.02
Approval	0.02	0.01	-0.03	0.05
Outcome Motivation	0.02	0.01	-0.07	0.04
Nothing Changes	0.02	0.01	0.01	0.04
	Taken Action			
	dydx	SE	95% CIs	
Female	-0.04	0.02	-0.07	0.00

Age	0.01	0.00	0.00	0.00
Carer	0.05	0.02	0.02	0.09
Political Socialization Family	0.07	0.02	0.03	0.10
Conscientiousness	-0.02	0.01	-0.04	-0.01
Approval	0.02	0.01	0.00	0.04
Outcome Motivation	0.03	0.01	0.01	0.05
Nothing Changes	-0.01	0.00	-0.03	0.00

Bold = significant <0.05

Table A3: Descriptives Variables (Details and Scale)

Variables	Scale
Ambition	‘Have you ever thought about putting yourself forward as a candidate for political office’; 1= Yes I have; 0 = No I haven’t
Female	Female = 1; Male = 0
Age	Age (continuous variable): mean = 47.86; SD = 17.06
Working Class	Working Class =1; All other classes = 0
Married	Married = 1; All Others = 0
Non White	Non-White = 1; White = 0
Carer	Carer = 1; Non-Carer = 0
Full Time Employment	FT Employment = 1; All Others = 0
Education	Education (categorical variable – treated in models as separate dummies): No qualifications = 0 (base); Secondary & Below Qualifications = 1; Post-Secondary = 2; Professional Qualifications = 3; Degree (UG & PG) = 4; DK/Not Say Education = 5
Political Socialization: Parents	Political Socialisation (Parents) 1 = Yes; 0 = No
Other Family	Political Socialisation (Other Family) 1 = Yes; 0 = No
Personality Big Five: Extraverted	Extraversion (Likert scale 1-5 where 5 is extraverted)
Personality Big Five: Agreeableness	Agreeableness (Likert scale 1-5 where and 5 is most agreeable)
Personality Big Five: Conscientiousness	Conscientiousness (Likert scale 1-5 where 5 is more Conscientious)
Personality Big Five: Emotionally Stable	Emotionally Stable (Likert scale 1-5 where and 5 is more emotionally stable)
Personality Big Five: Openness	Openness (Likert scale 1-5 where 5 is most open)
Pol System Efficacy: Nothing Changes	‘It doesn't matter which political party is in power, nothing ever changes’; Likert Scale 1 = Strongly Disagree; 5 = Strongly Agree
Achievement Motivation	Achievement Motivation Factor: (Power Matters - ‘Holding positions of power matters to me’; Thought Powerful - ‘I like to be thought of as powerful or influential’; Pol Fulfilment - ‘Being a politician would bring me fulfilment’; People Respect Me - ‘If I was a politician people would respect me’); Likert Scale 1 = Strongly Disagree; 5 = Strongly Agree. Achievement Motivation Factor: Power Matters .85; Thought Powerful .84; Pol Fulfilment .76; People Respect Me .65 (one component: eigenvalue 2.49; variance explained 60.47%)
Outcome Motivation	Outcome Motivation (Internalised) Factor: (HoldBeliefs - ‘It makes me feel good to hold the political beliefs that I do’;

	<p>Important - 'My political beliefs are an important part of who I am'; Ashamed - 'I would be ashamed to be someone who had no political beliefs at all'; Tell Beliefs - 'I often tell other people about my political beliefs'); Likert Scale 1 = Strongly Disagree; 5 = Strongly Agree</p> <p>Outcome Motivation Factor: HoldBeliefs .83; Important .89; Ashamed .77; Tell Beliefs .73 (one component: eigenvalue 2.60; variance explained 64.88%)</p>
Approval	<p>'People who I care about would support me getting more involved in politics'; Likert Scale 1 = Strongly Disagree; 5 = Strongly Agree</p>

Personality and the gender gap in political ambition

The gender gap in political ambition has been well-established by studies in a number of advanced democracies (Lawless and Fox 2005, 2010; Allen and Cutts 2018). Explanations at the aggregate-level focus on institutionalised sexism in political parties and institutions, while individual-level explanations instead focus on gendered socialization. More recently, attention has turned to personality traits as a possible explanation of individual-level political ambition. Individual-level personality traits have been shown to be associated with a range of political attitudes and behaviours, including turning out to vote and ideological preferences (Mondak 2010). Intuitively, it makes sense that personality might be associated with political ambition: some people are more outgoing or confident or decisive than others, and evidence suggests that these kinds of personality traits loom large in public perceptions of what makes a good politician (Clarke et al. 2018). ~~It is also plausible that the personalities of our politicians are going to affect policy decisions, especially under conditions of uncertainty, with some disposed to be comfortable with rapidly changing events and circumstances than others (Allen 2018).~~ To date, though, this recent research examining how personality and other traits identified by psychologists may affect ambition remains separate from existing research focused more on explanations of the gender gap centred on differential patterns of role socialization across the sexes. Consequently, as of yet we have only a limited understanding of how personality sits alongside these other variables as explanations of the gender gap in political ambition.

In this paper we offer, to the best of our knowledge, the first account of the gender gap in political ambition that takes both personality (measured using the Five Factor Model) and other canonical predictors of levels of ambition into account simultaneously. To explore the interaction of personality and ambition more deeply than existing accounts, we use original and unique cross-sectional 10,000 N data from Britain, collected in 2017, which includes a range of survey items relating to political ambition, political attitudes, and political participation. We address three main research questions. First, we ask whether the gender gap in nascent ambition (an initial consideration of running for office) is affected by the inclusion of personality measures and whether any sex effect holds after accounting for personality as well as other predictors. Second, we ask whether interaction effects suggest that exhibiting certain personality traits has differential effects for both men and women – do these ‘work’ differently depending on sex? Third, we examine whether sex and personality have differential effects at different stages of the ambition process – for example, differing between someone initially thinking about running for office and then actually doing so. Addressing each in turn, we first find that the gender gap in nascent ambition is robust to the inclusion of measures of personality alongside traditional socioeconomic predictors of political ambition. Second, we discover that being an especially extraverted woman makes you more likely to have considered running for office while this doesn’t matter for men. Third, we find that, when we consider action and not just intention, personality is not the driver that causes someone to move from intending to run for office to actually doing so.

The gender gap in political ambition

Within modern academic writing on the issue of political ambition, the existence of a gender gap is perhaps the most prominent concern. Arising from a growing interest in political recruitment among feminist political scientists in the 1980s and 1990s (Norris and Lovenduski 1995), the tremendous influence of the work of Jennifer Lawless and Richard Fox (2005; 2010) has led to almost all research on political ambition either focusing on the question of gender

either in full or in part. Various studies have examined progressive ambition (Allen 2013), the question of recruitment and gender (Allen and Cutts 2017), potential role model effects, the framing of politics as an activity and the purpose of holding political office (Schneider et al. 2016), and election aversion (Kanthak and Woon 2015).

Lawless and Fox (2005, 2010) framed their interest in gender, and in a range of other socioeconomic variables that they expected to influence levels of political ambition, as a reaction to an older literature that considered the question of political ambition in purely rational choice terms. On this older account, an individual would run for office when the opportunity presented itself. The assumption inherent here was that everyone was ambitious and that ambition was something of an innate characteristic (Shames 2017). Consequently, whether or not someone actually ran for office or not would be simply a question of circumstances rather than of underlying resources or access to political institutions among other factors. Lawless and Fox (2005, 2010) moved beyond the simple contention that individuals would run for office when the opportunity arose and instead considered how various socioeconomic variables interacted with gender to produce a gender gap in political ambition. They identify a range of factors, considered collectively as being part of a wider pattern of ‘gendered socialization’, as eventually resulting in the gender gap in political ambition. Against this, a positive self-assessment of political ability and encouragement from friends, family, and political sources are particularly important influences more likely to result in a woman considering a run for office (Schneider et al. 2016; Allen 2013). Critically, though, a range of influences dampen women’s ambition, including their caring responsibilities, the fact that they are less likely to be recruited for office than an equivalently-placed man, that they see themselves as less qualified than similar men, and has considered the role of gendered institutions, which might have a dampening effect on women’s ambition (Kenny 2013).

The Five Factor Model of personality, gender, and political ambition

Over time, though, research on gender and political ambition has shifted from a focus on women’s life circumstances to various external influences or stimuli acting on women and then, ultimately, to women themselves. Most recently, this has seen researchers consider the role of a range of psychological variables in the gender gap as well as in the development and demonstration of political ambition overall.¹ In terms of why researchers have been motivated to explore the relationship between personality traits and political ambition, this interest arguably grew out of a broader disciplinary concern with the relationship between personality and political behaviour (Mondak 2010; Gerber et al. 2010, 2011). Much of this research has focused on the Big Five or the Five Factor Model (FFM) of personality. The five traits included in the FFM are Extraversion, Agreeableness, Conscientiousness, Openness to Experience, and Emotional Stability. Extraversion is associated with multiple behaviours suggesting a kind of enthusiasm and joyfulness about the world – extraverts get involved, are outgoing, show their emotions, are proactive, and are passionate. Those who show high levels of Agreeableness are trusting, generous, forgiving, good-natured, and tend to rub along well with others. Individuals

¹ ~~An interesting point to consider is the parallel assumption made here and in the classic political ambition literature that, to some extent, ambition is inherent or innate. That is, if some combination of personality traits turned out to be an extremely good predictor or correlate of ambitious behaviour, we might well end up referring this combination as ‘ambition’. Given that personality traits seem relatively fixed, at least beyond adolescence, it would be a de facto innate trait.~~

who are high in Conscientiousness are hardworking, well-organized, focused, persistent, and take great care over their actions. Those who are Open to Experience are imaginative, creative, curious, and enjoy encountering novel things and experiences. Finally, those who display higher levels of Emotional Stability are calm, even-tempered, self-satisfied, and even-handed about events (McCrae and Costa 2003).

As Gerber et al. (2011, p.266) note, ‘Psychologists refer to these traits as dispositional or core traits. This label differentiates the Big Five from other aspects of individuals’ personalities such as their characteristic adaptations (values, attitudes, interests), self-concepts (self-esteem, identity), and objective biography (careers, background)’ (Gerber et al. 2011, p.266). Based on this, it is perhaps intuitive to consider the traits outlined above in terms of their relationship to political ambition. We might consider political ambition to be a characteristic adaptation – a ‘concrete manifestation[s] of basic tendencies’ (McCrae and Costa 1996, p.69) – that is influenced by the presence or absence of certain core traits. That is to say, political ambition is most likely the result of a combination of innate dispositional traits and situational factors. For example, given the range of activities that running for political office entails – knocking on doors, canvassing for votes, speaking in the media – we might expect individuals higher in Extraversion and Openness to Experience to be generally better disposed to undertaking the task than those who exhibit only low levels of these traits (Dynes et al. 2019). Conversely, individuals low in Emotional Stability might appear as unattractive potential candidates to political gatekeepers, as might individuals who are low in Conscientiousness. In this sense, personality traits work in both directions; as push factors that might predispose someone to be more likely to consider running for office (or not), but also as potential pull factors that are considered by gatekeepers during the process of doing so.

Building on existing research in the psychology literature, there is also good reason to think that accounting for personality in relatively complete models of political ambition might affect or further illuminate the gender gap we consistently find in it. Personality might matter not least because existing studies of the FFM have found persistent and significant differences in trait exhibition between men and women (Weisberg et al. 2011). They find higher levels of Extraversion, Agreeableness, and Neuroticism (i.e. lower scores of Emotional Stability) among women than men (Weisberg et al. 2011). These findings build on earlier studies that found women to be higher in Agreeableness, Warmth, Openness, and Neuroticism (again, equivalent to lower levels of Emotional Stability) (Costa Jr. et al. 2001). Overall, the pattern across studies is as follows: women score higher on Neuroticism, Agreeableness, and Extraversion, with greater variation in findings around Openness to Experience and Conscientiousness. Although not directly related to the Big Five, research by Kris Kanthak and Jonathan Woon has identified how women display higher levels of conflict aversion (in the form of electoral contestation) than men (2015). Similarly, Monika L. McDermott has demonstrated that gendered personality traits, mapping onto a spectrum of masculinity and femininity, relate to a range of political behaviours including propensity to engage in formal political activity (McDermott 2016). Indeed, this can have subsequent effects on how individuals are perceived, and therefore treated, by other political actors. Sarah Oliver and Meredith Conroy show, for example, that ‘women who self-identify as possessing more masculine personality traits report being recruited to run for political office at higher rates than both men and women who are less masculine’ (2018, p.1095).

Consequently, we might expect to find that the interaction of personality traits and gender differs for men and women in the political environment or that, in a model of political ambition, accounting for variation in personality types ‘mops up’ variation in outcomes that was previously unexplained. Given that psychologists remain uncertain regarding the ultimate roots

of gender differences in personality – the two primary contenders being a broadly evolutionary explanation and a broadly social one (Eagly and Wood 1999) – we might interpret differences as reflecting some inherent qualities of women or, perhaps more likely, as reflecting broader patterns of gendered socialization that start at birth. In reality, the balance is probably to be found in some combination of the two and, for our purposes, the ultimate root of any exhibited differences is somewhat beside the point. Understanding the source of differences might, admittedly, affect the kinds of policy response we recommend to ameliorate women’s persistent under-representation but, in the first instance, such an analysis is not necessary to explore the role of personality in shaping it.

Of course, there is more to the study of personality than the Big Five. Julie Blais and Scott Pruyers (2018; Pruyers and Blais 2017, 2018a, 2018b) have examined a range of other traits including the Dark Triad of narcissism, Machiavellianism, and psychopathy. Their findings suggest that there is a distinction of sorts between how personality affects levels of interest in running for and holding office and the question of how one perceives one’s qualifications to do so – that these are two separate processes (Blais and Pruyers 2018). Interestingly, while general measures of personality such as the Five Factor Model were associated with the former, the so-called ‘Dark measures’ were associated with the latter.

Using the Big Five, others have examined the role of personality in progressive ambition – instances where incumbent legislators consider whether to run for higher office – with mixed results (Dietrich et al. 2012; Allen and Cutts 2017). As part of a broader study of personality traits among state legislators in Arizona, Maine, and Connecticut, Dietrich et al. found that higher levels of Extraversion and Emotional Stability predicted greater levels of progressive ambition, even when controlling for sex (2012, p.206). Similarly, in a study of local legislators in London, Allen and Cutts find that legislators exhibiting higher levels of Emotional Stability are more likely to express progressive ambition (2017, p.5), though this effect is not a large one and is not robust to the inclusion of a full range of covariates. However, the fact that these studies, both deploying measures of the Five Factor Model of personality alongside a range of covariates drawn from the existing literature on political ambition, sample only incumbent legislators is likely to result in less variation in personality among this group given the already substantial filtration process through which they have passed. In reality, making it into even local political office is going to act as a huge selection effect and, based on what we know about personality and low-level political participation, we should expect part of this effect to be about personality (Mondak 2010). This is a point underlined by recent findings from Adam M. Dynes et al’s (2019) study of both a representative population sample as well as a sample of individuals who are already public officials. They find that the personality traits predicting nascent ambition differ from (and exert a stronger effect than) those predicting progressive ambition for higher office (Dynes et al. 2019). Specifically, among the population, ‘those with higher levels of extraversion and openness to experience are more likely to express an interest running for public office in the future, while those with higher levels of agreeableness and conscientiousness are less likely to do so’ (Dynes et al. 2019, p.312). Among incumbent public officials, increased extraversion and openness are related to greater interest in running for higher office, as is increased emotional stability, while ‘public officials with higher levels of agreeableness are less likely than those with low levels of agreeableness to express interest in running for public office as the likelihood of winning higher office increases’ (Dynes et al. 2019, p.312). This is also demonstrated in the work of Alice H. Eagly and Linda L. Carli (2007), who highlight how women who succeed in navigating the ‘labyrinth’ of organisational hierarchy are required to exhibit different traits and capabilities at different stages of the hierarchy, a process that appears to be deeply gendered.

To some extent, however, this recent research examining how personality and other traits may affect ambition remains separate from existing research focused more on socio-economic explanations of the gender gap. Primarily, this is a result of how the data of a more psychological bent used in ambition research has been collected. For the most part, unrepresentative samples are used, as are convenience samples of groups such as undergraduate students. Although not an issue when exploring specified mechanisms, for example, this limits the ability that this research has to comment on more general patterns of political ambition. As discussed by Crowder-Meyer and Lauderdale (2014, p.1), actual candidates are largely drawn from a pool of ‘highly educated individuals in their late 40s, employed in fields with high occupational prestige’. Concomitantly, much of this research does not include statistical controls for established socio-economic explanations of the gender gap in political ambition. So, for example, the extent to which an individual was raised within a political family is not included in personality-focused ambition research. Consequently, as of yet we have only a limited understanding of how personality ranks alongside these other variables as explanations of the gender gap in political ambition. As Blais and Pruyers (2018, pp.170-1) note,

Future studies on nascent political ambition and personality should consider broadening the sample to ... a more general community sample. Relatedly, future studies should also control for additional demographic variables beyond gender such as socio-economic status as well as variables such as political knowledge, interest, and efficacy.

Here, we seek to answer this call. We begin by outlining how we are able to do this, using original and unique data, before turning to descriptive and regression analyses respectively.

Data

We analyse original large-N data ($N=10,206$) collected in conjunction with YouGov from a British online panel in April 2017. Responses were weighted in line with normal YouGov procedures to produce a nationally-representative sample.² Our dependent variable is constructed from a series of three questions, all linked dependent on response. The first of these asked respondents whether they had ever considered running for political office. If they responded negatively, they were asked whether they thought they might consider it in future. If they responded affirmatively, they were first asked whether they had taken any action towards running for office and then, secondly, whether they had actually done it. Full details are provided in the Appendix.

We analyse political ambition in two stages in a similar manner to existing research (Allen and Cutts; 2017; Lawless and Fox, 2010; Maestas et al. 2006). Firstly, we distinguish between those respondents who expressed political ambition – combining those who would consider it in the future; are considering running for office but not taken action; and those who have taken action – and respondents who had no intention of standing for office. Secondly, we focus only on those with political ambition by comparing those who might consider running in the future, those who have some intention of seeking higher office and those who had actually done so. Turning to some initial descriptive analysis, just over 10 per cent of British citizens had considered running for higher office. Of those with political ambition, around 38 per cent had

² Data is weighted on the basis of age, gender social class, region, party identity, internet access and newspaper readership to ensure it is nationally representative.

expressed an intention to run and had actively considered standing while a further 18 per cent had taken some action towards actually doing so. Around 44 per cent stated they would rule out standing for office now but would actively consider it in the future.

Alongside sex, our other key variables of interest are measures of the FFM. To assess self-placement by respondents on each trait, we use the standard Ten Item Personality Inventory (TIPI) widely adopted when measuring the Big Five (Gosling et al. 2003). As the original authors of the TIPI items note, despite their brevity ‘the instruments reached adequate levels in terms of (a) convergence with widely used Big-Five measures in self, observer, and peer reports, (b) test-retest reliability, (c) patterns of predicted external correlates, and (d) convergence between self and observer ratings’ (Gosling et al. 2003). Ten-item survey batteries have additionally been used by political scientists in the past (Mondak 2010, p.75). We use our data to address three main research questions:

RQ₁ – how, if at all, is the longstanding and established sex effect in nascent (initial) ambition affected by the inclusion of personality measures when modelling political ambition and other factors are taken into account.

RQ₂ - does displaying certain personality traits have differential effects for men and women – do these ‘work’ differently depending on sex?

RQ₃ - do sex and personality traits have differential effects at different stages of the ambition process?

As noted above, we include a number of control variables in our analysis in addition to our measures of the FFM. These are drawn from the existing literature, namely the comparable studies and samples of Lawless and Fox (2005, 2010) and, together with the sex variable, constitute what might be considered the canonical predictors of political ambition across the population. These fit into seven broad categories. First, socio-demographic controls for age, social class, marital status, and employment status among others. Second, education level. Third, the early-life political socialisation of an individual. Fourth, the extent to which an individual feels politically efficacious and able to exert political influence. Fifth, the extent to which an individual is motivated to hold political office in search of a sense of personal achievement and, sixth, the extent to which an individual is motivated to hold political office as a way of achieving some other external outcome in ideological or policy terms. Finally, we account for the extent to which an individual perceives injunctive norms in their social network – that is, the extent to which they feel that people who are close to them would approve of them becoming more involved in politics and of them seeking political office.³

Sex, Personality and Political Ambition: A Descriptive Profile

Figure 1 provides a descriptive breakdown of political ambition and our three categories of ambition by sex. It suggests that there are clear sex differences. Of those respondents who expressed political ambition, just under two thirds were men. We can summarise the relationship between sex and overall ambition (specified as separate nominal or dichotomous variables) by running cross-tabulations and reporting chi-square and Cramer’s V statistics. Given the visible sex differences in Figure 1, it is unsurprising that the Pearson chi-square statistic is 239.19 (p-value of 0.000) and a Cramer’s V of 0.15 (p-value 0.000) which indicates a fairly strong association between sex and overall ambition. Simply put, when compared with the average, men are significantly more likely to be considering or actively seeking to stand for

³ We provide a full description of the variables used in Table A3 in the appendix.

political office. Only a third of those who had taken action to stand for office were women. A similar split existed among those who were currently thinking of running. Slightly more than two fifths of those who would consider standing for political office in the future were women. So while this category contained more women the general trend – clear sex differences – remained. Again we find similar significant associations between sex and these different ambition categories which substantiate the visual evidence.⁴

Turning to how the FFM of personality is associated with political ambition, we can identify some clear relationships between exhibiting certain personality traits and holding an interest in running for political office.⁵ We find that individuals exhibiting higher levels of Openness to Experience are more likely to have considered running for political office as are individuals scoring higher on measures of Emotional Stability and Extraversion. Conversely, those exhibiting greater levels of Conscientiousness and Agreeableness are less likely to have considered a run. Full statistical details of these associations are included in Footnote 3.

Examining how personality traits exhibit by sex among those who are politically ambitious (see graphs in Figure 2), we can detect some initial patterns suggesting that personality effects are not identical, or even consistent in a broader sense, across both men and women. While we see fairly similar distributions across the sexes in terms of Conscientiousness and Emotional Stability, there are slightly greater concentrations at lower levels of both Openness to Experience and Agreeableness among men. Finally, and most notably, Extraversion sees a far greater concentration at higher levels among women than among men, consistent with existing findings.

Modelling Political Ambition

Do sex differences on political ambition hold when other factors are taken in account? How important are personality traits? Are women with certain personality traits more likely to stand or consider standing for public office? Or do other factors explain why some individuals show greater progressive political ambition in Britain than others? In order to address these key

⁴ There were significant associations between sex and consider later (chi-square = 54.02, $p < .001$, $p\text{-value} = 0.000$; Cramer's V = 0.07, $p < .001$, $p\text{-value} = 0.000$); actively considering now (chi-square = 105.96, $p\text{-value} < .001$, $p\text{-value} = 0.000$; Cramer's V = 0.10, $p < .001$, $p\text{-value} = 0.000$) and taken action categories (chi-square = 55.93, $p < .001$, $p\text{-value} = 0.000$; Cramer's V = 0.07, $p < .001$, $p\text{-value} = 0.001$).

⁵ There were significant associations between extraversion and overall ambition (chi-square = 189.05, $p\text{-value} = 0.000$, $p < .001$; Cramer's V = 0.14, $p\text{-value} = 0.000$, $p < .001$, Gamma 0.19, $p\text{-value} = 0.000$, $p < .001$); Agreeableness and overall ambition (chi-square = 64.96, $p\text{-value} = 0.000$, $p < .001$; Cramer's V = 0.08, $p\text{-value} = 0.000$, $p < .001$; Gamma -0.12, $p\text{-value} = 0.000$, $p < .001$) Conscientiousness and overall ambition (chi-square = 37.47, $p\text{-value} = 0.000$, $p < .001$; Cramer's V = 0.06, $p\text{-value} = 0.000$, $p < .001$; Gamma -0.06, $p\text{-value} = 0.000$, $p < .001$); Emotional stability and overall ambition (chi-square = 68.19, $p\text{-value} = 0.000$, $p < .001$; Cramer's V = 0.08, $p\text{-value} = 0.000$, $p < .001$; Gamma 0.09, $p\text{-value} = 0.000$, $p < .001$) and openness and overall ambition (chi-square = 265.90, $p\text{-value} = 0.000$, $p < .001$; Cramer's V = 0.16, $p\text{-value} = 0.000$, $p < .001$; Gamma 0.25, $p\text{-value} = 0.000$, $p < .001$).

questions, we run a number of regression models. First, we use a binomial logistic regression model of political ambition in Britain to contrast those who expressed ambition against those who have ruled out actively seeking to stand (see Table 1 below).

Here, we run four models: Model 1 includes just sex and our measures of the FFM. Model 2 includes our key variable of sex and explores whether an effect indicative of a gender gap in political ambition still holds after controlling for established drivers of political ambition including socio-demographic variables – age, class, education, marital status, employment status - early-life political socialization in the home, growing up in a political family and the division of domestic and caring labour in addition to measures of the FFM. Model 3 explores whether these sex and personality effects remain once measures of achievement motivation, political system efficacy, outcome motivation and approval from those close to the respondent (injunctive norms) are taken into account (see the Appendix for the breakdown of questions used and how they were operationalized in the models). Addressing our second main research question, Model 4 includes interactions between the personality measures and respondent gender, to test whether the effect of personality traits and other variables on political ambition are different for women than for men. Any insignificant findings for these interaction terms would suggest that the personality and other variables that predict women’s likelihood of standing for office also predict men’s.

Second, we use a multinomial logistic regression to examine political ambition in greater depth. Here we contrast this least immediately ambitious group - those who would consider running in the future but not now - against those who are actively considering now but have not yet acted on it and those individuals who have taken action.⁶ These models are reported in Table 2 and contain the same variables as used in Model 3 in Table 1 above. The fit of these models is assessed using standard goodness-of-fit measures including the log-likelihood and the Akaike Information Criterion (AIC) and in all cases these operate in the expected direction with reductions in both from Model 1 to 3 in Table 1. To aid interpretation of the results, we use odds ratios and, for the key findings, convert these to predicted probabilities.

Our data provides clear evidence of sex differences in political ambition both at the bivariate level and in multivariate models when other factors are controlled for. Simply put, women remain significantly less likely to run for political office in Britain than men even once personality differences are taken into account. To ease interpretation, we estimate the discrete

⁶ Initially we contemplated using an ordinal logistic regression. However, during testing of the model we found that it violated the proportional odds/parallel lines assumption. Gologit and Gologit2 options were examined but concerns around the unconstrained model not requiring ordinality; estimated probabilities can go negative; interpretation difficulties etc. we decided instead to opt for the conventional multinomial logistic model. Here we tested the assumption of independence of irrelevant alternatives (IIA) using various tests – Hausman; Small-Hsiao tests etc. We found no violations of the IIA assumption. All results relating to these tests are available on request from the authors. More broadly, it is important to note that theoretically ambition measures are dependent on one another yet it is commonplace for ambition questions to be asked of subsets of survey respondents. This is common problem with questionnaire design and the standard way in which ambition is measured. We highlight this (and thank an anonymous reviewer for also noting this) to stress that a better measure is needed in order to capture progressive ambition in a robust manner.

change on the probability for each of the values averaged across the observed values. We report these average marginal effects of a one-unit change in terms of probability changes for each predictor for key predictors that are significant at the 5 per cent confidence level from Model 3 in Table 1 below.⁷ Focusing on the logistic model with no interactions (Table 1 Model 3), on average, the probability of women being politically ambitious in Britain is eight percentage points lower than men.

Crucially, although they do not eliminate a sex effect, personality traits do also drive political ambition. It seems that Extraverts are less daunted by the prospect of standing for office while those individuals who score higher levels of Openness to Experience are also significantly more likely to express political ambition. Even when we take account of additional drivers such as outcome and achievement motivations, approval and political system efficacy, being higher in Extraversion or Openness to Experience increases the probability of standing for public office by one and three percentage points respectively. In both cases, it is unsurprising that individuals with these traits see the prospect of seeking office an attractive proposition. Conversely, individuals with high levels of Agreeableness or Conscientiousness are significantly less likely to run for political office. Both of these fit with expectations as agreeable individuals would seek to avoid conflict at all costs and are probably not suited to the scrutiny, polarising discourse and level of disagreement which is a mainstay of British political life. Likewise, more conscientious individuals think carefully before making decisions, are loss averse and undoubtedly would weigh up the costs of seeking office and the probability of winning. When combined together it is likely – as indicated in our data – individuals would on balance be less inclined to run for political office. Given previous evidence, it is also unsurprising that in Model 1 we find those who exhibit traits of emotional stability have a greater interest in standing for office, however once additional potential drivers are controlled for this fails to remain a significant influence.

Insert Table 1

Insert Figure 3 (AMEs from Model 2 Table 1)

Of the remaining predictors, well-established drivers of political ambition exerted significant influence. Based on the results from Model 2, individuals who express political ambition are significantly less likely to be working class or in full time employment while those with professional qualifications or degrees are more than two times more likely to stand for public office. The probability of seeking office increased by nine percentage points for those with degrees or professional qualifications respectively and by five percentage points for individuals with post-secondary qualifications when compared with the base category no qualifications. As expected, having a politicised upbringing through parents or the wider family structure increased the probability of standing for office by three percentage points. Lastly, both outcome and achievement motivation are significant drivers. Those who stress the importance of their own political beliefs, tell other people, live their life in accordance and are involved in activities

⁷ We calculate the baseline probability of expressing political ambition where all predictor variables are set on their empirical mean. The predicted probability equals 11.6 percentage points. We use this to examine the impact of each predictor because we can now compare the respective effect to the baseline probability.

that communicate their political beliefs are 1.6 times more likely to seek public office. Similar effects exist for those who power matters to them, like the thought of being influential and feel that being a politician would bring personal fulfilment – classified as achievement motivation. On average, both increase the probability of seeking office by six percentage points. Those individuals who question whether anything changes whatever party is in power are less likely to express political ambition. However, approval from those who care most and are close to you also drives political ambition, increasing the probability of standing by six percentage points.

Turning to the interaction between gender and personality, Model 3 in Table 1 presents a fully specified model with the interaction terms. Due to the inclusion of interaction terms, the coefficient and AMEs associated with the sex variable is not an accurate reflection of the gender gap in political ambition. However, interacting sex with personality traits, approval and outcome motivation does allow us to assess the joint effects of the key components and the interaction term holding other variables constant. Earlier we highlighted studies that have found considerable differences in trait exhibition by sex so it makes sense to test whether this holds for political ambition. Given structural barriers and gendered socialization variables such as caring responsibilities, we might expect support from those close to them may matter more for women than men. Similarly, women who express strong beliefs and engage more widely in communicating these beliefs may feel more empowered to stand for public office and be less perturbed by the gender barriers and costs of seeking office. Our findings are reported in Model 3 and the AMEs are shown in Figure A1). Only two interactions are significant and both are positive. The negative main effect for sex holds and suggests that women are less likely, all things being equal, to express political ambition than men. But the positive interaction term with extraversion and outcome motivation suggests when either is greater (individuals become more extraverted or internalised outcome motivation increases) the difference (in terms of odds) between women and men gets smaller. We demonstrate this effect by calculating the predictive margins and then plotting the results (see Figures 4 and 5 below).

Figures 4 and 5

Sex, Personality and Political Ambition

Among those who express political ambition, are women still less likely than men to have either considered standing or taken action to seek political office? Are personality traits key at different stages of the ambition process after accounting for other potential drivers? What influences individuals to ultimately take action and stand for parliament? We address these questions using a multinomial logistical regression. As noted before, we use the same format and predictor variables with the key findings presented in Table 2. Again we report the average marginal effects to fully assess the influence of these variables (Figure 6).⁸

In our multinomial regression, the weaker expression of political ambition – where an individual would consider running for office at a later date but not now – is used as the base category. Evidence from earlier descriptive analysis suggested that more women were in this

⁸ The baseline probabilities when all independent variables are set at their empirical mean are as follows: considering standing later but not now 45 percentage points; Considering standing 39 percentage points; Taken action 16 percentage points

category of ambition than the considering running and taken action alternatives.⁹ As a consequence, we expect a negative relationship between sex and these ambition categories. But do these hold when other predictors are added?

Our evidence suggests it does: women are significantly less likely than men to have considered running for office and have taken action when compared against the base category.¹⁰ There is little evidence that personality traits are important for those who are considering standing and those who have taken action. Only conscientious individuals are significantly less likely to have taken action. The probability of conscientious individuals having taken action and stood for office is two percentage points lower than the base category. Other factors seem to be driving progressive ambition. The older you are the more likely you are to have taken steps to seek election to parliament. Having a political upbringing, specifically primarily the political influence of one's wider family outside of just parents, increases the probability of having stood for office by seven percentage points. Both approval and outcome motivation increase the probability of taking action by two and three percentage points respectively. While the probability of standing for office is on average one percentage point higher for those individuals who believe that parties and politicians can change things as opposed to those who think whatever party is in power nothing changes.¹¹ All other variables such as early-life political exposure and socialization in the home, class and education alongside the majority of personality traits are insignificant. Simply put, it seems that these factors may not explain acting on ambition in Britain but are more influential in determining why individuals may express political ambition in the first place.

Insert Table 2; Insert Figure 6 (AMEs)

Conclusion

The study of political ambition has begun to take note of the role of personality as a potential driver of ambitious intent and action. However, this has often taken place in isolation from the broader study of political behaviour that analyses larger, more representative samples and

⁹ This is substantiated by a logistic regression (see appendix Table A1) which compares this weaker category against the other two ambition categories. Here we find that women were 1.4 times more likely than men to consider running for office later but not now even when holding other variables constant.

¹⁰ If you contrast those currently considering standing against those who have taken action then you find no evidence of a sex effect. Similarly, only conscientiousness (negative) is significant of the Big five personality traits. Sex is a crucial determinant of whether individuals move from considering standing but not now to actively seeking office. If one thinks of conscientiousness as persistence, this makes some sense. It also influences whether individuals express political ambition in the first place. Personality also drives ambition in the first instance – whether an individual expresses ambition or not – but is not a major influence on whether one decides to take action or not.

¹¹ A table of AMEs for significant variables across all categories are included in the appendix (Table A2).

controls for a wide range of canonical socioeconomic predictors. In this paper we bring these two approaches together for what, to the best of our knowledge, is the first time, using original large-N data collected from a British population sample.

We addressed three main research questions. First, how does the inclusion of measures of the FFM of personality alongside traditional socio-economic predictors of political ambition affect the longstanding gender gap highlighted in almost all of these models? We found that, although personality has a clear role in driving the consideration of running for office above and beyond these other factors (suggesting that it should be included in all future research in this area), it does little to reduce or eliminate the prominence and persistence of the sex effect. In other words, the gender gap in initially considering running for office (nascent ambition) is robust to the inclusion of measures of personality alongside traditional socioeconomic predictors of political ambition.

Our second question asked whether the influence of personality differed for men and women. To put it another way, does personality ‘work’ in different ways dependent on sex? To test this, we included interaction effects in our full regression model and found that one FFM trait, Extraversion, seems to have a different effect on levels of political ambition among women than it does among men. Effectively, while having higher levels of Extraversion doesn’t affect political ambition among men, an increase in Extraversion among women to the level found among men does make a difference. In other words, being an especially extraverted woman makes you more likely to have considered running for office while this doesn’t matter for men – something that reinforces the findings of Eagly and Carli (2007) and raises further questions around whether increased exhibition of this trait will affect the propensity of a woman to be recruited by political actors, echoing Oliver and Conroy (2018).

Third, did we observe similar personality and sex effects for progressive ambition when other potential drivers were taken account? We found that, when breaking down the political ambition process into an intention to run and actually doing so, personality exerts minimal influence in sorting among those who are already politically ambitious – personality is not the thing that causes someone to move from intending to run for office to actually doing so.

Our findings suggest that, while personality is not a panacea for scholars of political ambition or the gender gap therein, it does enhance our understanding of the processes by which some citizens end up running for public office while others do not. Consequently, we recommend that future large-N studies take full account of personality alongside traditional socioeconomic predictors and that political ambition questions become a staple of long running panel datasets so that we can understand the causal drivers and mechanisms behind why (and why not) individuals think about standing and actively decided to seek public office. However, while acknowledging that personality has some role, it should also be emphasised once again that the important, if less exciting and glamorous, work of studying social influences and political institutions would seem to still bear more fruit when it comes to understanding the gender gap in political ambition.

References

- Allen, P., 2013. Gendered Candidate Emergence in Britain: Why are More Women Councillors Not Becoming MPs?. *Politics*, 33(3), pp.147-159.
- Allen, P. and Cutts, D., 2017. Aspirant candidate behaviour and progressive political ambition. *Research & Politics*, 4(1), p.2053168017691444.

- 1 Allen, P. and Cutts, D., 2018. An Analysis of Political Ambition in Britain. *The Political*
2 *Quarterly*, 89(1), pp.73-81.
- 3 Blais, J. and Pruyssers, S., 2017. The power of the dark side: personality, the dark triad, and
4 political ambition. *Personality and Individual Differences*, 113, pp.167-172.
- 5
6
7 Costa Jr, P.T., Terracciano, A. and McCrae, R.R., 2001. Gender differences in personality traits
8 across cultures: robust and surprising findings. *Journal of personality and social*
9 *psychology*, 81(2), p.322.
- 10
11 Dietrich, B.J., Lasley, S., Mondak, J.J., Remmel, M.L. and Turner, J., 2012. Personality and
12 legislative politics: The Big Five trait dimensions among US state legislators. *Political*
13 *Psychology*, 33(2), pp.195-210.
- 14
15
16
17 Dynes, A.M., Hassell, H.J. and Miles, M.R., 2019. The personality of the politically
18 ambitious. *Political Behavior*, 41(2), pp.309-336.
- 19
20
21 Eagly, A.H. and Wood, W., 1999. The origins of sex differences in human behavior: Evolved
22 dispositions versus social roles. *American psychologist*, 54(6), p.408.
- 23
24
25 Eagly, A.H. and Carli, L.L., 2007. *Through the labyrinth: The truth about how women become*
26 *leaders*. Harvard Business Press.
- 27
28
29 Gerber, A.S., Huber, G.A., Doherty, D., Dowling, C.M. and Ha, S.E., 2010. Personality and
30 political attitudes: Relationships across issue domains and political contexts. *American*
31 *Political Science Review*, 104(1), pp.111-133.
- 32
33
34 Gerber, A.S., Huber, G.A., Doherty, D. and Dowling, C.M., 2011. The big five personality
35 traits in the political arena. *Annual Review of Political Science*, 14.
- 36
37
38 Kanthak, K. and Woon, J., 2015. Women don't run? Election aversion and candidate
39 entry. *American Journal of Political Science*, 59(3), pp.595-612.
- 40
41
42 Kenny, M., 2013. *Gender and political recruitment: Theorizing institutional change*. Springer.
- 43
44
45 Lawless, J.L. and Fox, R.L., 2005. *It takes a candidate: Why women don't run for office*.
46 Cambridge University Press.
- 47
48
49 Lawless, J.L. and Fox, R.L., 2010. *It still takes a candidate: Why women don't run for office*.
50 Cambridge University Press.
- 51
52
53 Maestas, C.D., Fulton, S., Maisel, L.S. and Stone, W.J., 2006. When to risk it? Institutions,
54 ambitions, and the decision to run for the US House. *American Political Science*
55 *Review*, 100(2), pp.195-208.
- 56
57
58 McCrae, R.R. and Costa, P.T., 2003. *Personality in adulthood: A five-factor theory*
59 *perspective*. Guilford Press.
- 60
61
62
63
64
65

- Mondak, J.J., 2010. *Personality and the foundations of political behavior*. Cambridge University Press.
- Norris, P. and Lovenduski, J., 1995. *Political recruitment: Gender, race and class in the British Parliament*. Cambridge University Press.
- Oliver, S. and Conroy, M., 2018. Tough enough for the job? How masculinity predicts recruitment of city council members. *American Politics Research*, 46(6), pp.1094-1122.
- Pruysers, S. and Blais, J., 2018a. A Little Encouragement Goes a (not so) Long Way: An Experiment to Increase Political Ambition. *Journal of Women, Politics & Policy*, 39(3), pp.384-395.
- Pruysers, S. and Blais, J., 2018b. Narcissistic Women and Cash-Strapped Men: Who Can Be Encouraged to Consider Running for Political Office, and Who Should Do the Encouraging?. *Political Research Quarterly*, p.1065912918786040.
- Schneider, M.C., Holman, M.R., Diekmann, A.B. and McAndrew, T., 2016. Power, conflict, and community: How gendered views of political power influence women's political ambition. *Political Psychology*, 37(4), pp.515-531.
- Shames, S.L., 2017. *Out of the running: Why millennials reject political careers and why it matters*. NYU Press.
- Weisberg, Y.J., DeYoung, C.G. and Hirsh, J.B., 2011. Gender differences in personality across the ten aspects of the Big Five. *Frontiers in psychology*, 2, p.178.

Tables

Table 1: Logistic Regression model of Political Ambition

Variables	Model 1 β SE	Model 2 β SE	Model 3 β SE	Model 4 β SE
Constant		-2.53* 0.25	-3.58* 0.30	-3.34* 0.36
<i>Socio-Demographic</i>				
Female	-0.79* 0.06	-0.86* 0.06	-0.67* 0.06	-1.28* 0.47
Age	-	-0.01* 0.00	-0.00 0.00	-0.00 0.00
Working Class	-	-0.29* 0.06	-0.16* 0.07	-0.15* 0.07
Married	-	-0.02 0.06	-0.00 0.07	-0.00 0.07

Non White	-	-0.18 0.14	-0.30 0.16	-0.29 0.16
Carer	-	0.18* 0.07	0.20* 0.07	0.20* 0.07
Full Time Employment	-	-0.21* 0.06	-0.14* 0.06	-0.14* 0.06
Education (Base = No Quals)				
Secondary& Below	-	0.20 0.16	0.19 0.16	0.19 0.16
Post-Secondary	-	0.52* 0.16	0.40* 0.16	0.41* 0.16
Professional Quals	-	0.78* 0.16	0.74* 0.16	0.74* 0.16
Degree (UG & PG)	-	0.97* 0.16	0.78* 0.16	0.77* 0.16
DK/Not Say Education	-	0.43* 0.21	0.34 0.21	0.35 0.21
Political Socialization				
Parents	-	0.48* 0.08	0.30* 0.08	0.30* 0.08
Other Family	-	0.47* 0.07	0.26* 0.08	0.25* 0.08
Personality Big Five				
Extraverted	0.17* 0.02	0.18* 0.02	0.07* 0.02	0.01 0.03
Agreeableness	-0.15* 0.03	-0.13* 0.03	-0.10* 0.03	-0.10* 0.04
Conscientiousness	-0.09* 0.02	-0.07* 0.03	-0.10* 0.03	-0.09* 0.04
Emotionally Stable	0.05* 0.02	0.05* 0.02	0.03 0.02	0.00 0.03
Openness	0.36* 0.03	0.30* 0.03	0.24* 0.03	0.26* 0.04
Political System-Efficacy				
Nothing Changes	-	-	-0.10* 0.03	-0.10* 0.03
Achievement				
Achievement Motivation	-	-	0.49* 0.03	0.49* 0.03
Outcome				
Outcome Motivation	-	-	0.46* 0.03	0.38* 0.05
Care (Injunctive Norm)				
Approval	-	-	0.50* 0.04	0.49* 0.05
Interactions				
Female*Extraversion	-	-	-	0.13* 0.05
Female*Agreeableness	-	-	-	-0.01 0.06
Female*Conscientiousness	-	-	-	0.00 0.06
Female*Emotional Stability	-	-	-	0.07 0.05
Female*Openness	-	-	-	-0.07 0.06
Female*Outcome	-	-	-	0.21* 0.07
Female*Approval	-	-	-	0.03 0.07
Model Fit				
Chi-Square <0.05*	570.06*	890.76*	1345.73*	1335.78*
Log Likelihood	-4576.84	-4363.822	-3798.73	-3788.06
R ²	0.07	0.11	0.23	0.23
AIC	9167.67	8767.64	7645.45	7638.11
N	10206	10206	10206	10206

sig <0.05. Note: Bivariate relationship: Female -0.80 (0.05).

Table 2: Multinomial Logistic Regression of Political Ambition

Variables	Model 1 MLogit β SE	Model 1 MLogit β SE
Constant	-1.56* 0.55	-2.30* 0.70

<i>Socio-Demographic</i>		
Female	-0.29* 0.11	-0.41* 0.16
Age	0.01 0.00	0.04* 0.01
Working Class	0.08 0.12	-0.00 0.16
Married	0.08 0.12	-0.07 0.15
Non White	-0.34 0.27	0.08 0.33
Carer	-0.02 0.13	0.40* 0.16
Full Time Employment	-0.13 0.11	-0.30 0.16
<i>Education (Base = No Quals)</i>		
Secondary& Below	-0.01 0.36	-0.07 0.44
Post-Secondary	-0.03 0.36	-0.23 0.45
Professional Quals	0.18 0.36	0.15 0.44
Degree (UG & PG)	0.19 0.35	0.14 0.43
DK/Not Say Education	-0.00 0.44	-0.11 0.58
<i>Political Socialization</i>		
Parents	0.05 0.14	0.19 0.16
Other Family	0.19 0.14	0.59* 0.16
<i>Personality Big Five</i>		
Extraverted	-0.01 0.04	0.05 0.05
Agreeableness	-0.04 0.05	-0.09 0.06
Conscientiousness	-0.04 0.05	-0.20* 0.06
Emotionally Stable	0.03 0.04	0.01 0.06
Openness	0.09 0.05	-0.08 0.07
<i>Political System-Efficacy</i>		
Nothing Changes	0.09* 0.04	0.09* 0.04
<i>Achievement</i>		
Achievement Motivation	-0.11 0.06	0.03 0.08
<i>Outcome</i>		
Outcome Motivation	0.17* 0.06	0.32* 0.09
<i>Care (Injunctive Norm)</i>		
Approval	0.17* 0.06	0.26* 0.08
<i>Model Fit</i>		
Chi-Square <0.05*	239.11*	239.11*
Log Likelihood	-1849.50	-1849.50
R ²	0.06	0.06
AIC	3795.00	3795.00
N	1964	1964

sig <0.05. Note: Model 1 multinomial logit: Base category: consider running later but not now. Bivariate relationship: (thought about taking action) - Female -0.24 (0.11); Bivariate relationship (Taken action) - Female -0.31* (0.13). No interactions with Female were significant either in the mlogit model.

Figures

Figure 1 – Breakdown of stages of ambition by sex (Overall N = 1964; Consider later N = 861; Consider now N = 742; Take action N = 361)

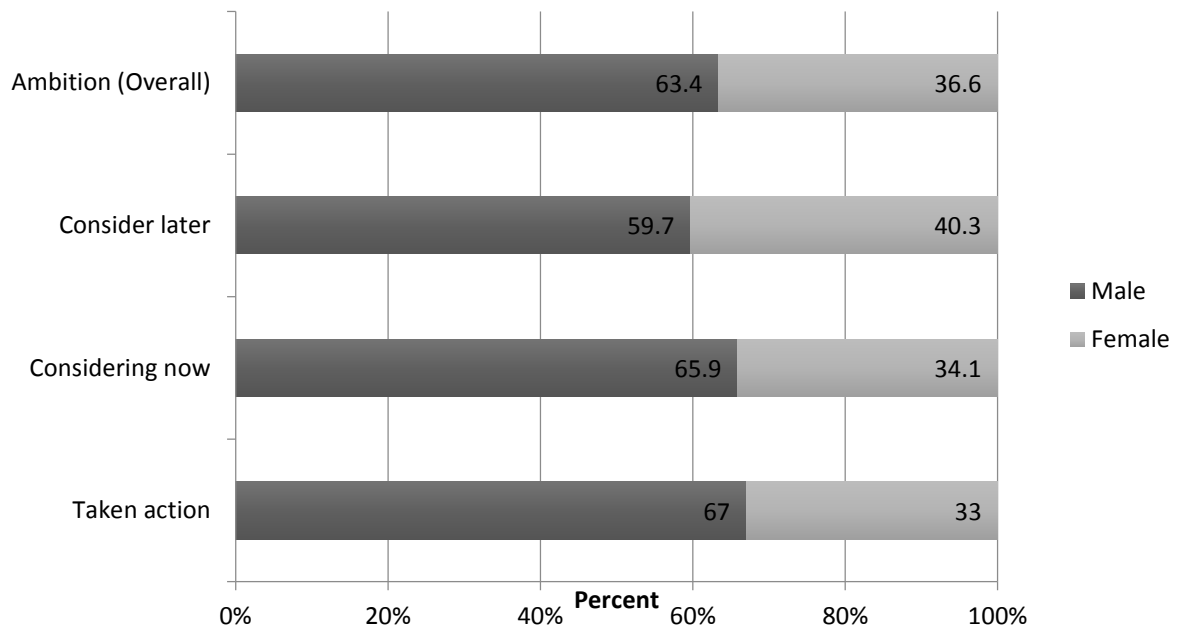
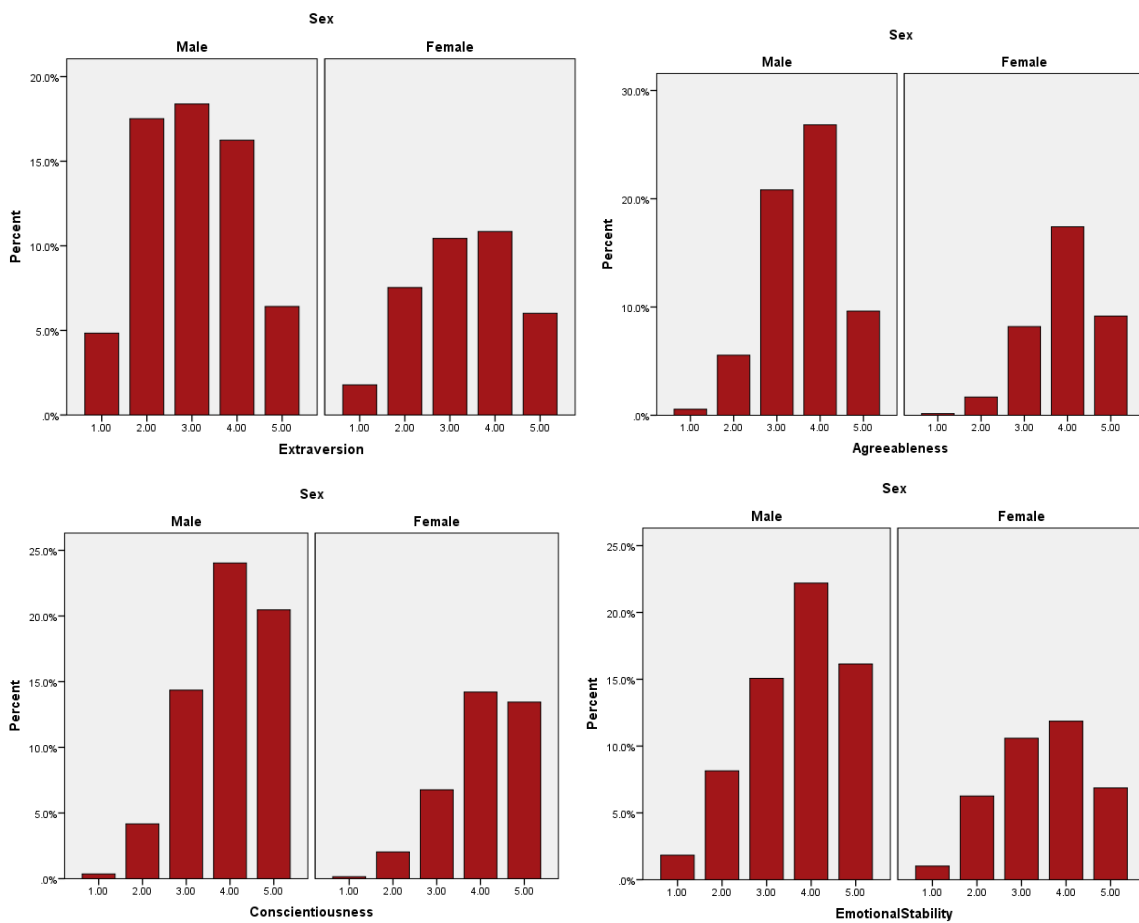


Figure 2: Ambition (all) by FFM Traits and by Sex



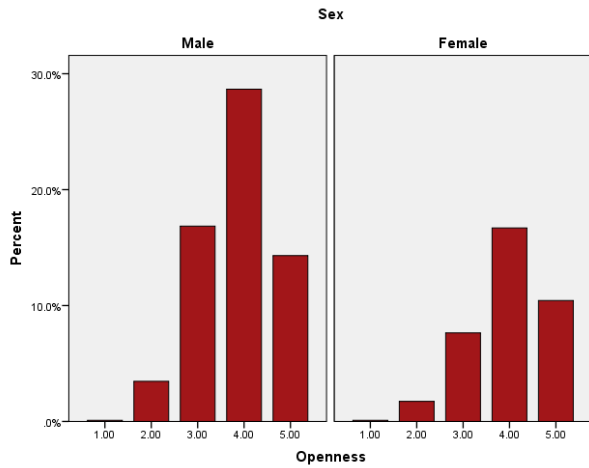


Figure 3: Average Marginal Effects of Significant Explanatory Variables of Ambition (from Model 2)

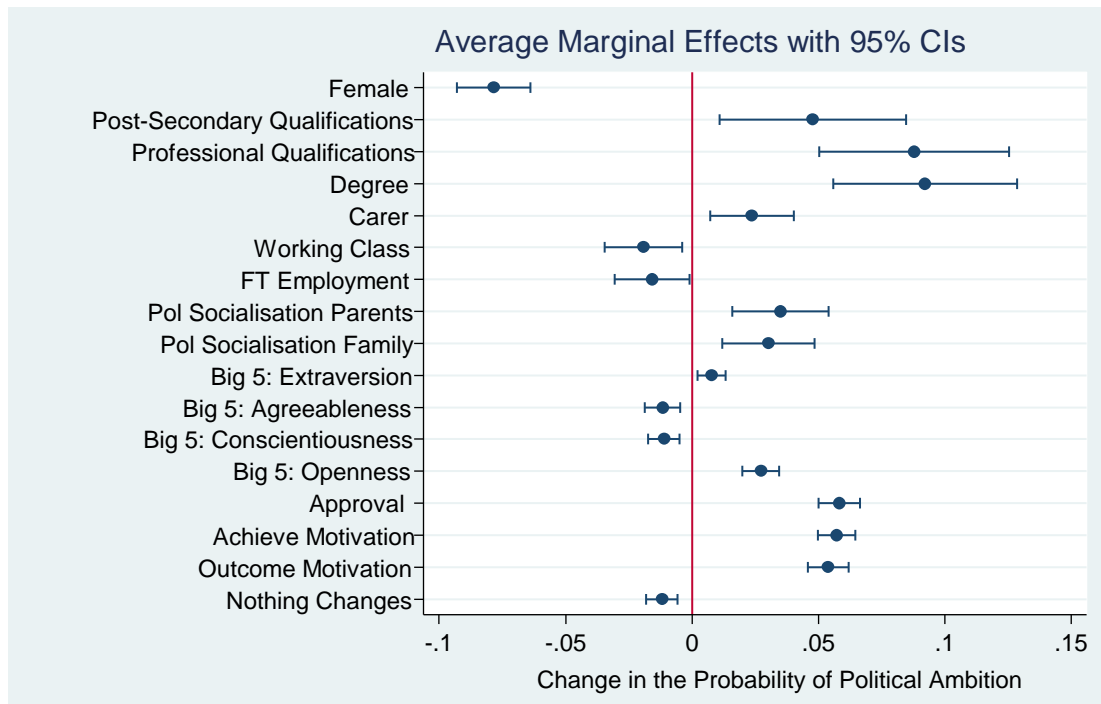


Figure 4: Predictive Margins of Female and Extraversion (Model 3; Table 1)

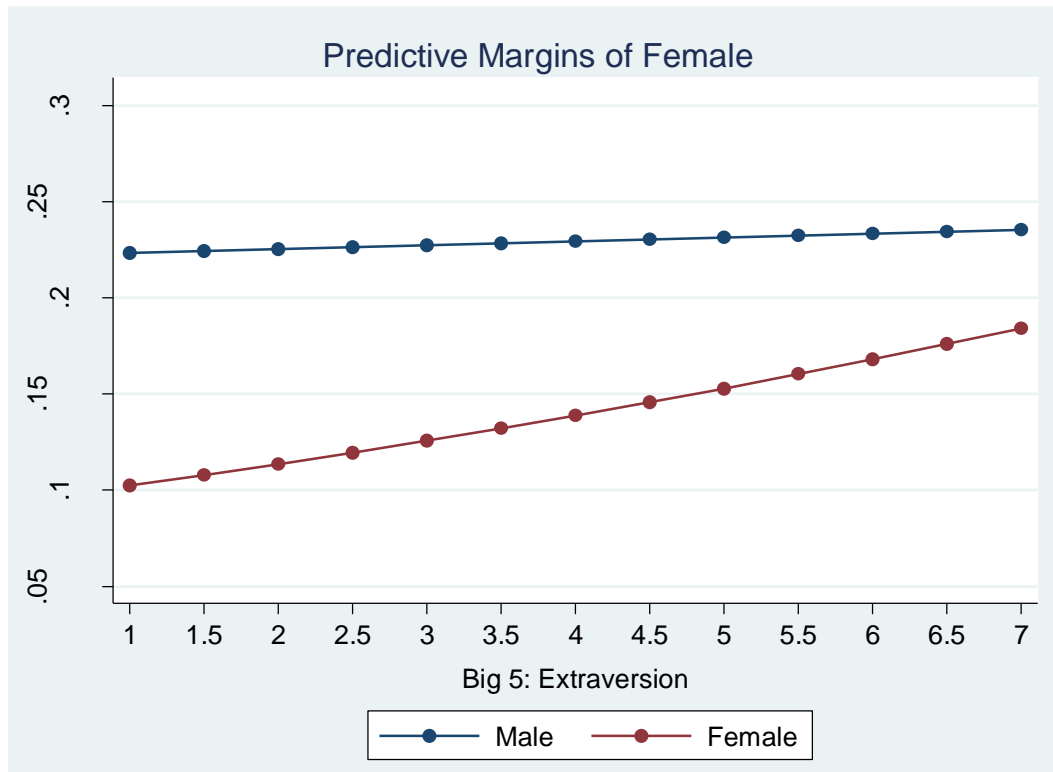


Figure 5: Predictive Margins of Female and Outcome Motivation (Model 3; Table 1)

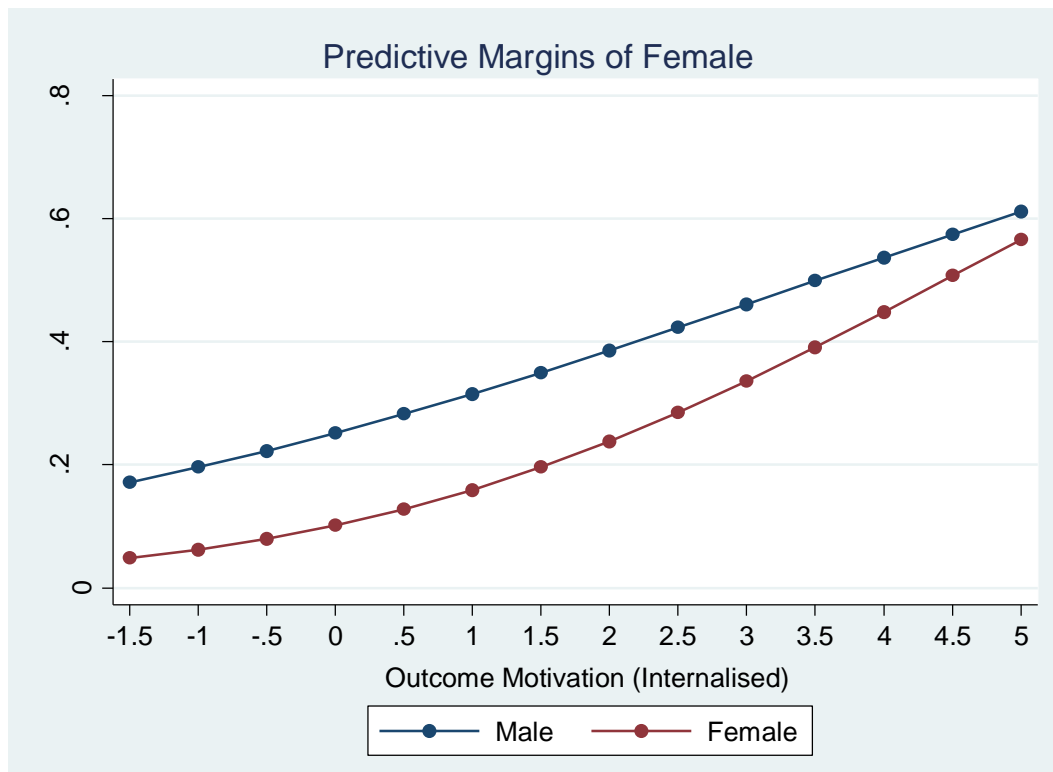
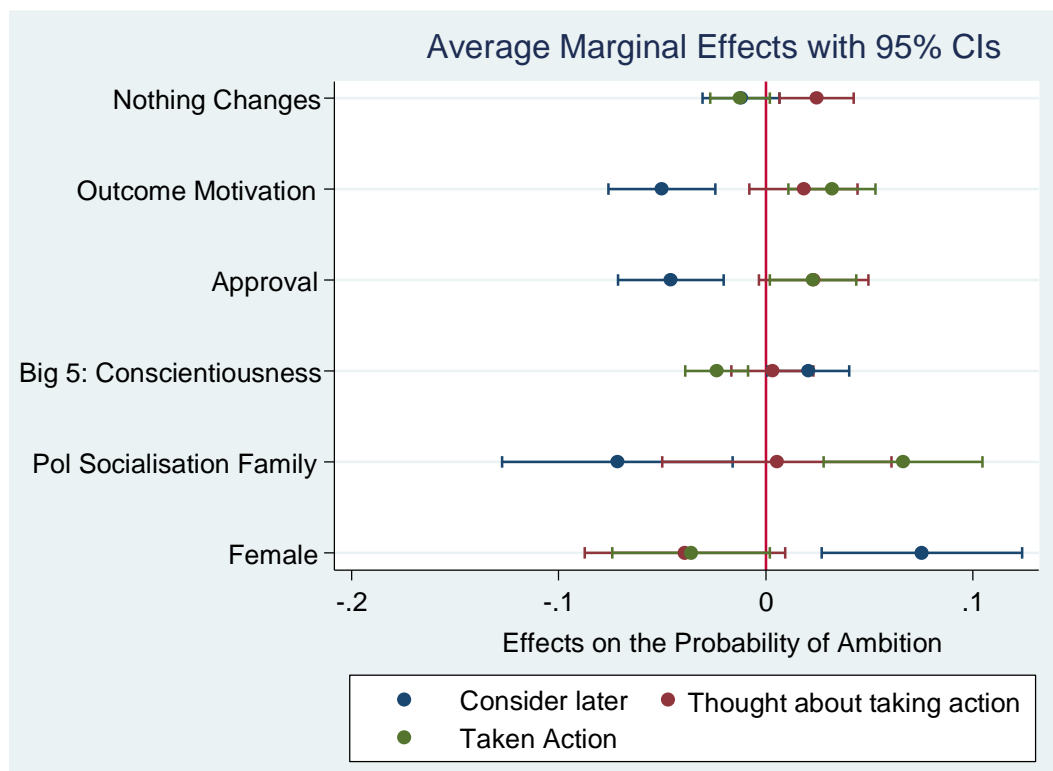
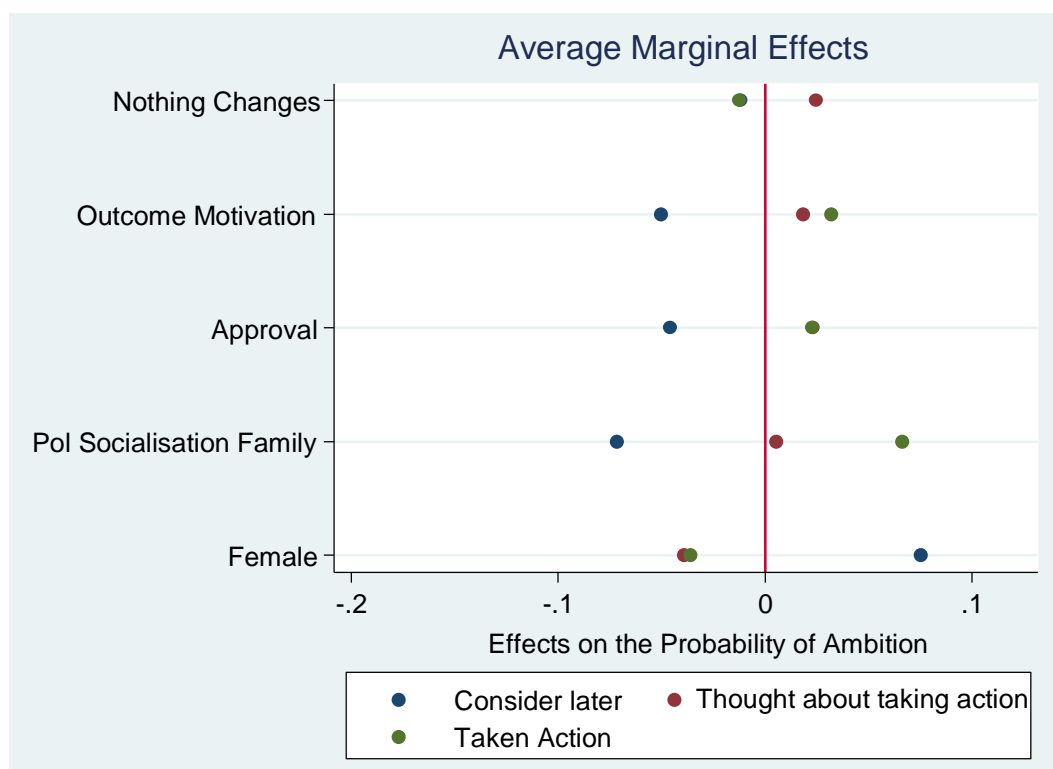


Figure 6: Average Marginal Effects of Significant Variables on Progressive Ambition



N.B. Figure 6 Alternative if the CIs look difficult to interpret



Appendix

Table A1: Logistic Regression Model of those who would consider running later but not now

Variables	Model 1 β SE
Constant	1.12* 0.50
<i>Socio-Demographic</i>	
Female	0.32* 0.11
Age	-0.02* 0.00
Working Class	-0.05 0.12
Married	-0.03 0.11
Non White	0.21 0.24
Carer	-0.11 0.12
Full Time Employment	0.18 0.10
<i>Education (Base = No Quals)</i>	
Secondary & Below	0.04 0.32
Post-Secondary	0.09 0.33
Professional Quals	-0.16 0.33
Degree (UG & PG)	-0.16 0.32
DK/Not Say Education	0.06 0.41
<i>Political Socialization</i>	
Parents	-0.09 0.13
Other Family	-0.33* 0.12
<i>Personality Big Five</i>	
Extraverted	-0.01 0.04
Agreeableness	0.06 0.05
Conscientiousness	0.09* 0.04
Emotionally Stable	-0.03 0.04
Openness	-0.04 0.05
<i>Political System-Efficacy</i>	
Nothing Changes	-0.05 0.04
<i>Achievement</i>	
Achievement Motivation	-0.07 0.05
<i>Outcome</i>	
Outcome Motivation	-0.22* 0.06
<i>Care (Injunctive Norm)</i>	
Approval	-0.20* 0.06
Model Fit	
Chi-Square <0.05*	121.12*
Log Likelihood	-1240.02
R ²	0.05
AIC	2528.04
N	1964

sig <0.05. Note: Model 1 Logit: Bivariate relationship - Female 0.26 (0.10). No interactions with Female were significant either in the logit model.

Figure A1: Average Marginal Effects of Significant Explanatory Variables of Ambition (from Model 3 including interaction effects)

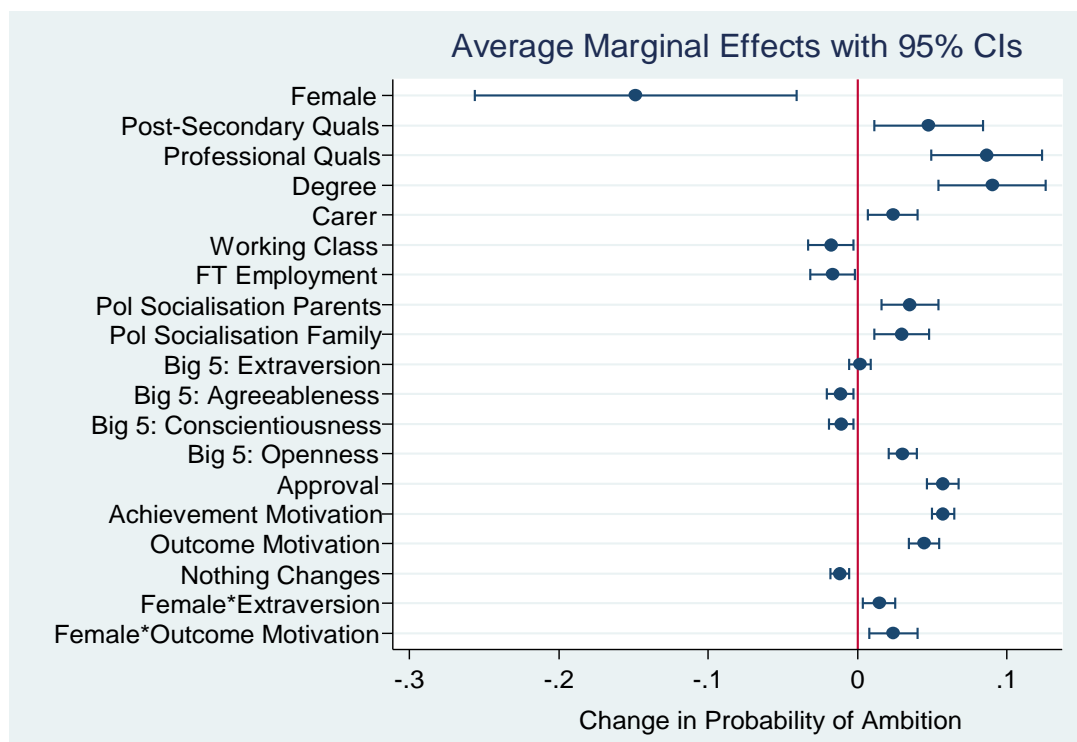


Table A2: Average Marginal Effects (including SEs and CIs) of Progressive Ambition - Significant Variables only from Table 2 Model 1 (Multinomial Logit)

Variables	Not Considering Now			
	dydx	SE	95% CIs	
Female	0.08	0.02	0.03	0.24
Age	-0.01	0.00	-0.01	-0.00
Carer	-0.02	0.02	-0.08	-0.03
Political Socialization Family	-0.07	0.03	-0.13	-0.02
Conscientiousness	0.02	0.01	0.02	0.00
Approval	-0.05	0.01	-0.07	-0.02
Outcome Motivation	-0.05	0.01	-0.08	-0.02
Nothing Changes	-0.01	0.01	-0.03	0.01
Variables	Considering Now			
	dydx	SE	95% CIs	
Female	-0.04	0.02	-0.09	0.01
Age	-0.00	0.00	-0.00	0.00
Carer	-0.03	0.03	-0.08	0.02
Political Socialization Family	0.01	0.03	-0.05	0.06
Conscientiousness	0.00	0.01	-0.02	0.02
Approval	0.02	0.01	-0.03	0.05
Outcome Motivation	0.02	0.01	-0.07	0.04
Nothing Changes	0.02	0.01	0.01	0.04
	Taken Action			
	dydx	SE	95% CIs	
Female	-0.04	0.02	-0.07	0.00
Age	0.01	0.00	0.00	0.00
Carer	0.05	0.02	0.02	0.09
Political Socialization Family	0.07	0.02	0.03	0.10
Conscientiousness	-0.02	0.01	-0.04	-0.01
Approval	0.02	0.01	0.00	0.04
Outcome Motivation	0.03	0.01	0.01	0.05
Nothing Changes	-0.01	0.00	-0.03	0.00

Bold = significant <0.05

Table A3: Descriptives Variables (Details and Scale)

Variables	Scale
Ambition	‘Have you ever thought about putting yourself forward as a candidate for political office’; 1= Yes I have; 0 = No I haven’t
Female	Female = 1; Male = 0
Age	Age (continuous variable): mean = 47.86; SD = 17.06
Working Class	Working Class =1; All other classes = 0
Married	Married = 1; All Others = 0
Non White	Non-White = 1; White = 0
Carer	Carer = 1; Non-Carer = 0
Full Time Employment	FT Employment = 1; All Others = 0
Education	Education (categorical variable – treated in models as separate dummies): No qualifications = 0 (base); Secondary & Below Qualifications = 1; Post-Secondary = 2; Professional

	Qualifications = 3; Degree (UG & PG) = 4; DK/Not Say Education = 5
Political Socialization: Parents	Political Socialisation (Parents) 1 = Yes; 0 = No
Other Family	Political Socialisation (Other Family) 1 = Yes; 0 = No
Personality Big Five: Extraverted	Extraversion (Likert scale 1-5 where 5 is extraverted)
Personality Big Five: Agreeableness	Agreeableness (Likert scale 1-5 where 5 is most agreeable)
Personality Big Five: Conscientiousness	Conscientiousness (Likert scale 1-5 where 5 is more Conscientious)
Personality Big Five: Emotionally Stable	Emotionally Stable (Likert scale 1-5 where 5 is more emotionally stable)
Personality Big Five: Openness	Openness (Likert scale 1-5 where 5 is most open)
Pol System Efficacy: Nothing Changes	'It doesn't matter which political party is in power, nothing ever changes'; Likert Scale 1 = Strongly Disagree; 5 = Strongly Agree
Achievement Motivation	Achievement Motivation Factor: (Power Matters - 'Holding positions of power matters to me'; Thought Powerful - 'I like to be thought of as powerful or influential'; Pol Fulfilment - 'Being a politician would bring me fulfilment'; People Respect Me - 'If I was a politician people would respect me'); Likert Scale 1 = Strongly Disagree; 5 = Strongly Agree. Achievement Motivation Factor: Power Matters .85; Thought Powerful .84; Pol Fulfilment .76; People Respect Me .65 (one component: eigenvalue 2.49; variance explained 60.47%)
Outcome Motivation	Outcome Motivation (Internalised) Factor: (HoldBeliefs - 'It makes me feel good to hold the political beliefs that I do'; Important - 'My political beliefs are an important part of who I am'; Ashamed - 'I would be ashamed to be someone who had no political beliefs at all'; Tell Beliefs - 'I often tell other people about my political beliefs'); Likert Scale 1 = Strongly Disagree; 5 = Strongly Agree Outcome Motivation Factor: HoldBeliefs .83; Important .89; Ashamed .77; Tell Beliefs .73 (one component: eigenvalue 2.60; variance explained 64.88%)
Approval	'People who I care about would support me getting more involved in politics'; Likert Scale 1 = Strongly Disagree; 5 = Strongly Agree

Tables

Table 1: Logistic Regression model of Political Ambition

Variables	Model 1 β SE	Model 2 β SE	Model 3 β SE	Model 4 β SE
Constant		-2.53* 0.25	-3.58* 0.30	-3.34* 0.36
<i>Socio-Demographic</i>				
Female	-0.79* 0.06	-0.86* 0.06	-0.67* 0.06	-1.28* 0.47
Age	-	-0.01* 0.00	-0.00 0.00	-0.00 0.00
Working Class	-	-0.29* 0.06	-0.16* 0.07	-0.15* 0.07
Married	-	-0.02 0.06	-0.00 0.07	-0.00 0.07
Non White	-	-0.18 0.14	-0.30 0.16	-0.29 0.16
Carer	-	0.18* 0.07	0.20* 0.07	0.20* 0.07
Full Time Employment	-	-0.21* 0.06	-0.14* 0.06	-0.14* 0.06
<i>Education (Base = No Quals)</i>				
Secondary& Below	-	0.20 0.16	0.19 0.16	0.19 0.16
Post-Secondary	-	0.52* 0.16	0.40* 0.16	0.41* 0.16
Professional Quals	-	0.78* 0.16	0.74* 0.16	0.74* 0.16
Degree (UG & PG)	-	0.97* 0.16	0.78* 0.16	0.77* 0.16
DK/Not Say Education	-	0.43* 0.21	0.34 0.21	0.35 0.21
<i>Political Socialization</i>				
Parents	-	0.48* 0.08	0.30* 0.08	0.30* 0.08
Other Family	-	0.47* 0.07	0.26* 0.08	0.25* 0.08
<i>Personality Big Five</i>				
Extraverted	0.17* 0.02	0.18* 0.02	0.07* 0.02	0.01 0.03
Agreeableness	-0.15* 0.03	-0.13* 0.03	-0.10* 0.03	-0.10* 0.04
Conscientiousness	-0.09* 0.02	-0.07* 0.03	-0.10* 0.03	-0.09* 0.04
Emotionally Stable	0.05* 0.02	0.05* 0.02	0.03 0.02	0.00 0.03
Openness	0.36* 0.03	0.30* 0.03	0.24* 0.03	0.26* 0.04
<i>Political System-Efficacy</i>				
Nothing Changes	-	-	-0.10* 0.03	-0.10* 0.03
<i>Achievement</i>				
Achievement Motivation	-	-	0.49* 0.03	0.49* 0.03
<i>Outcome</i>				
Outcome Motivation	-	-	0.46* 0.03	0.38* 0.05
<i>Care (Injunctive Norm)</i>				
Approval	-	-	0.50* 0.04	0.49* 0.05
<i>Interactions</i>				
Female*Extraversion	-	-	-	0.13* 0.05
Female*Agreeableness	-	-	-	-0.01 0.06
Female*Conscientiousness	-	-	-	0.00 0.06
Female*Emotional Stability	-	-	-	0.07 0.05
Female*Openness	-	-	-	-0.07 0.06
Female*Outcome	-	-	-	0.21* 0.07
Female*Approval	-	-	-	0.03 0.07
<i>Model Fit</i>				
Chi-Square <0.05*	570.06*	890.76*	1345.73*	1335.78*
Log Likelihood	-4576.84	-4363.822	-3798.73	-3788.06

R ²	0.07	0.11	0.23	0.23
AIC	9167.67	8767.64	7645.45	7638.11
N	10206	10206	10206	10206

sig <0.05. Note: Bivariate relationship: Female -0.80 (0.05).

Table 2: Multinomial Logistic Regression of Political Ambition

Variables	Model 1		Model 1	
	β	SE	β	SE
Constant	-1.56*	0.55	-2.30*	0.70
<i>Socio-Demographic</i>				
Female	-0.29*	0.11	-0.41*	0.16
Age	0.01	0.00	0.04*	0.01
Working Class	0.08	0.12	-0.00	0.16
Married	0.08	0.12	-0.07	0.15
Non White	-0.34	0.27	0.08	0.33
Carer	-0.02	0.13	0.40*	0.16
Full Time Employment	-0.13	0.11	-0.30	0.16
<i>Education (Base = No Quals)</i>				
Secondary& Below	-0.01	0.36	-0.07	0.44
Post-Secondary	-0.03	0.36	-0.23	0.45
Professional Quals	0.18	0.36	0.15	0.44
Degree (UG & PG)	0.19	0.35	0.14	0.43
DK/Not Say Education	-0.00	0.44	-0.11	0.58
<i>Political Socialization</i>				
Parents	0.05	0.14	0.19	0.16
Other Family	0.19	0.14	0.59*	0.16
<i>Personality Big Five</i>				
Extraverted	-0.01	0.04	0.05	0.05
Agreeableness	-0.04	0.05	-0.09	0.06
Conscientiousness	-0.04	0.05	-0.20*	0.06
Emotionally Stable	0.03	0.04	0.01	0.06
Openness	0.09	0.05	-0.08	0.07
<i>Political System-Efficacy</i>				
Nothing Changes	0.09*	0.04	0.09*	0.04
<i>Achievement</i>				
Achievement Motivation	-0.11	0.06	0.03	0.08
<i>Outcome</i>				
Outcome Motivation	0.17*	0.06	0.32*	0.09
<i>Care (Injunctive Norm)</i>				
Approval	0.17*	0.06	0.26*	0.08
Model Fit				
Chi-Square <0.05*	239.11*		239.11*	
Log Likelihood	-1849.50		-1849.50	
R ²	0.06		0.06	
AIC	3795.00		3795.00	
N	1964		1964	

sig <0.05. Note: Model 1 multinomial logit: Base category: consider running later but not now. Bivariate relationship: (thought about taking action) - Female -0.24 (0.11); Bivariate relationship (Taken action) - Female -0.31* (0.13). No interactions with Female were significant either in the mlogit model.

Figures

Figure 1 – Breakdown of stages of ambition by sex (Overall N = 1964; Consider later N = 861; Consider now N = 742; Take action N = 361)

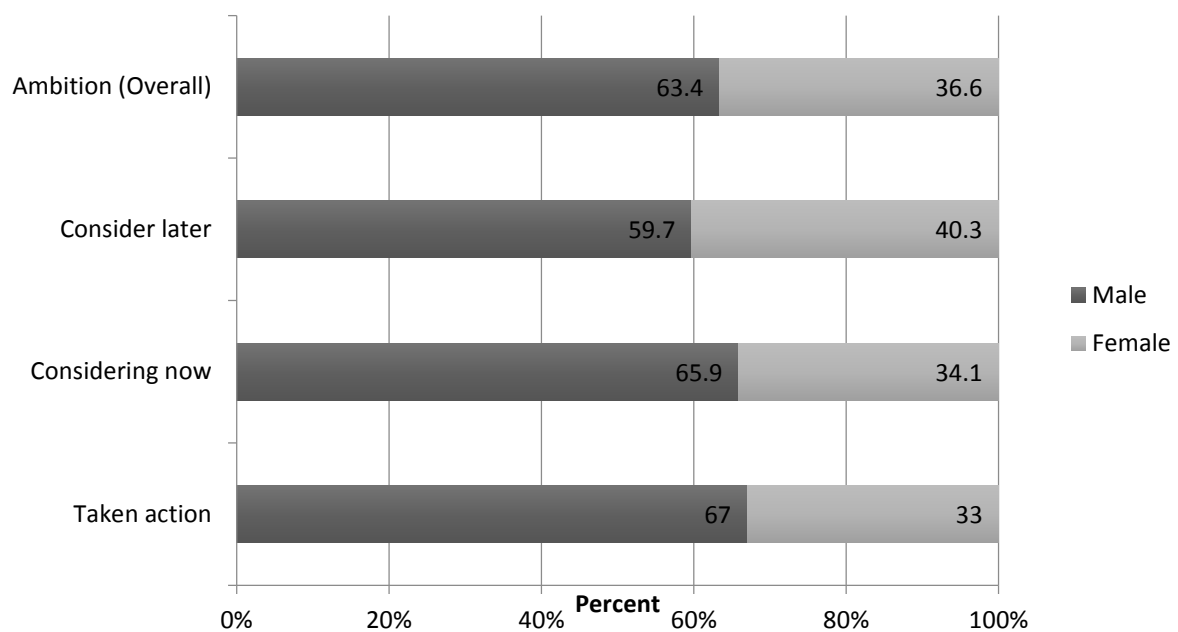
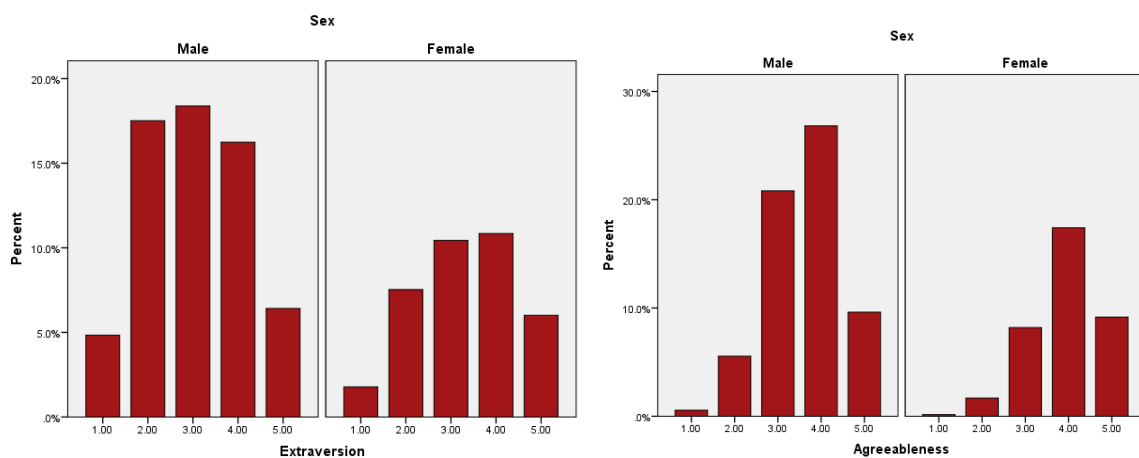


Figure 2: Ambition (all) by FFM Traits and by Sex



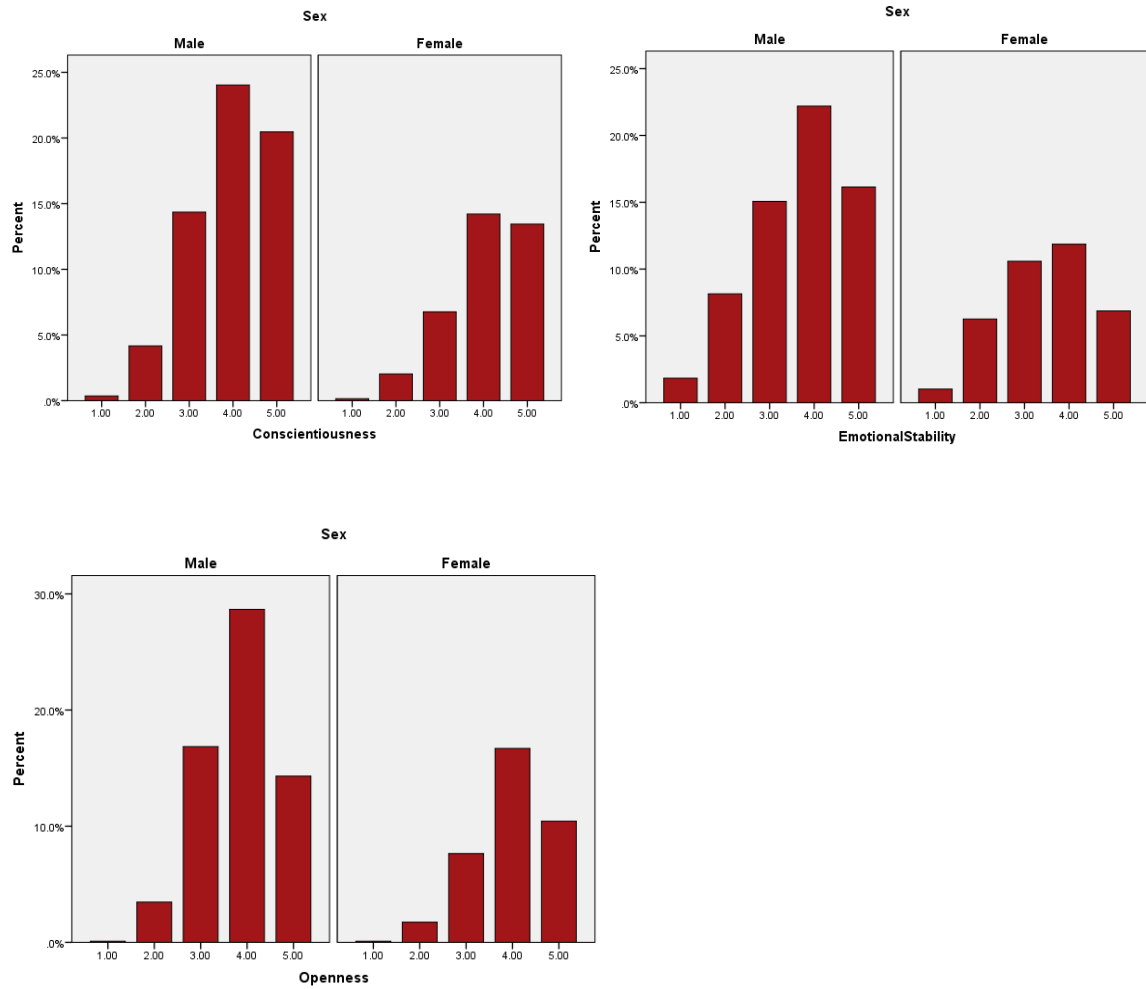


Figure 3: Average Marginal Effects of Significant Explanatory Variables of Ambition (from Model 2)

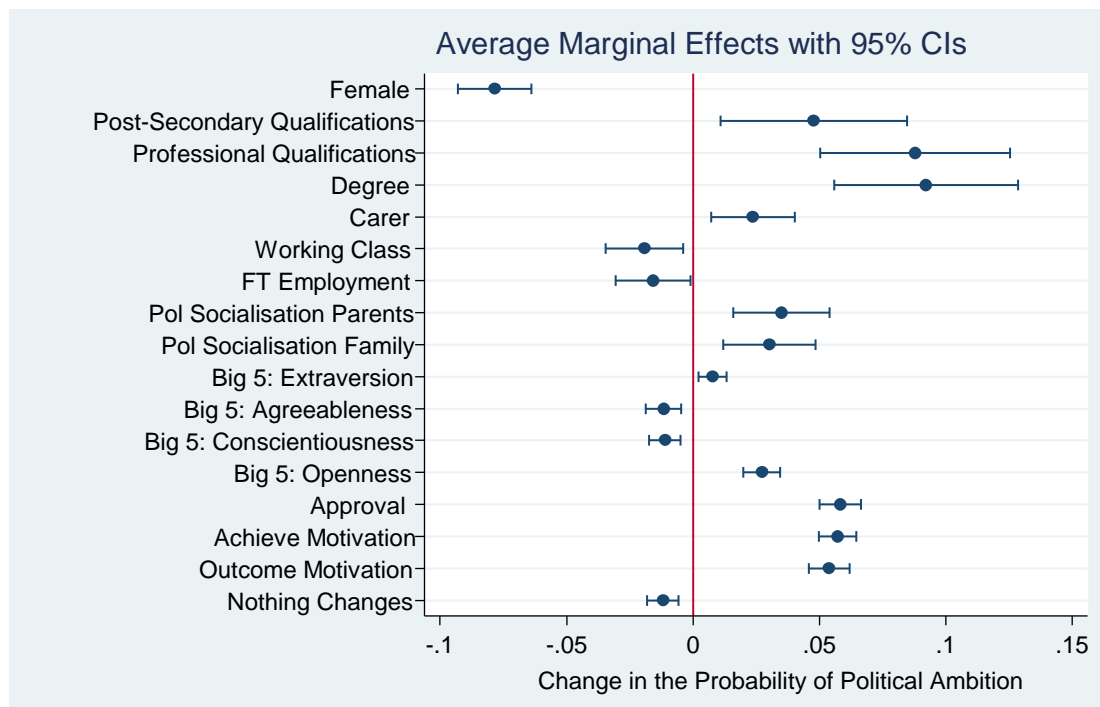


Figure 4: Predictive Margins of Female and Extraversion (Model 3; Table 1)

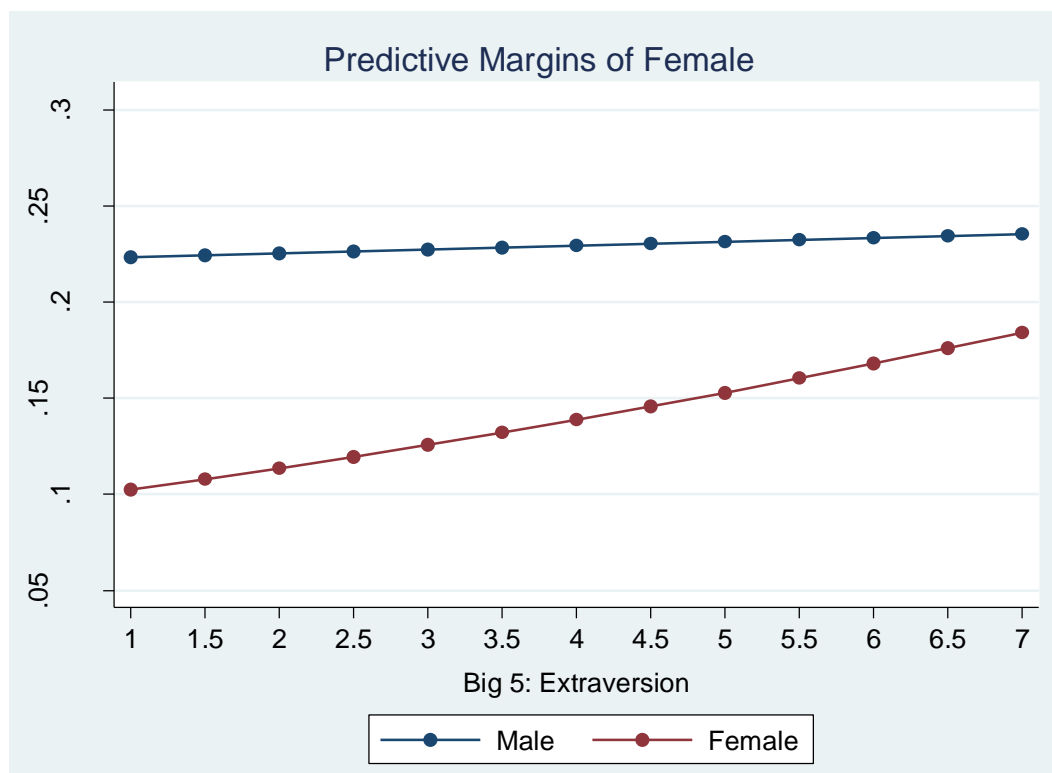


Figure 5: Predictive Margins of Female and Outcome Motivation (Model 3; Table 1)

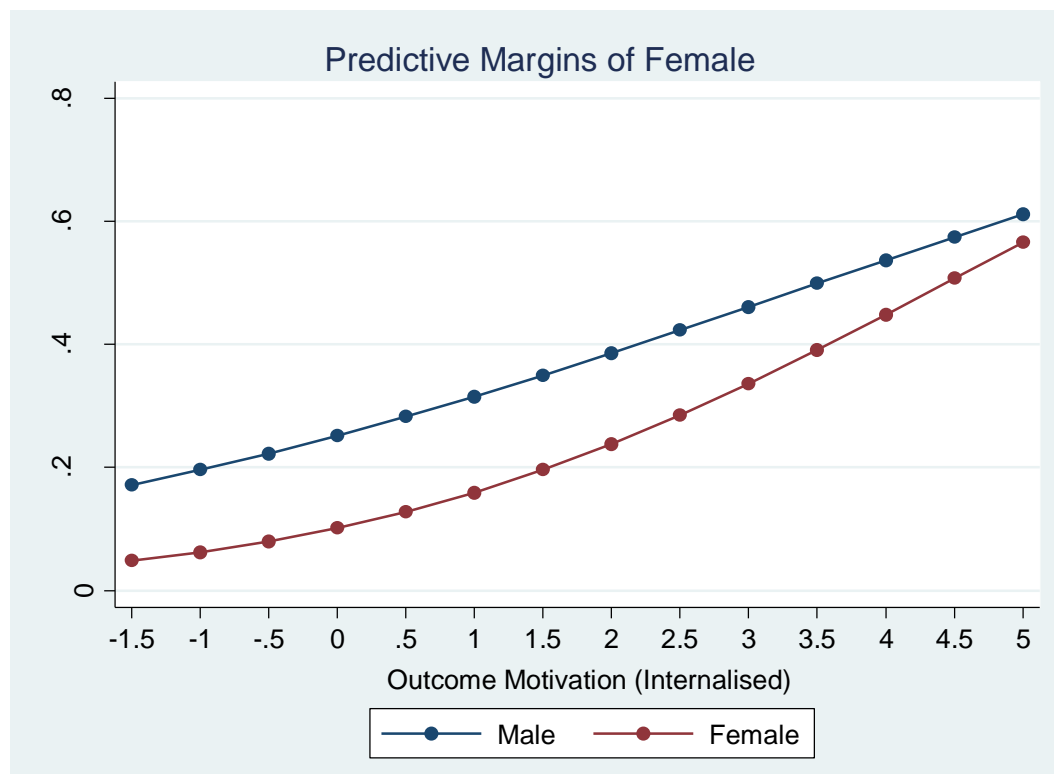
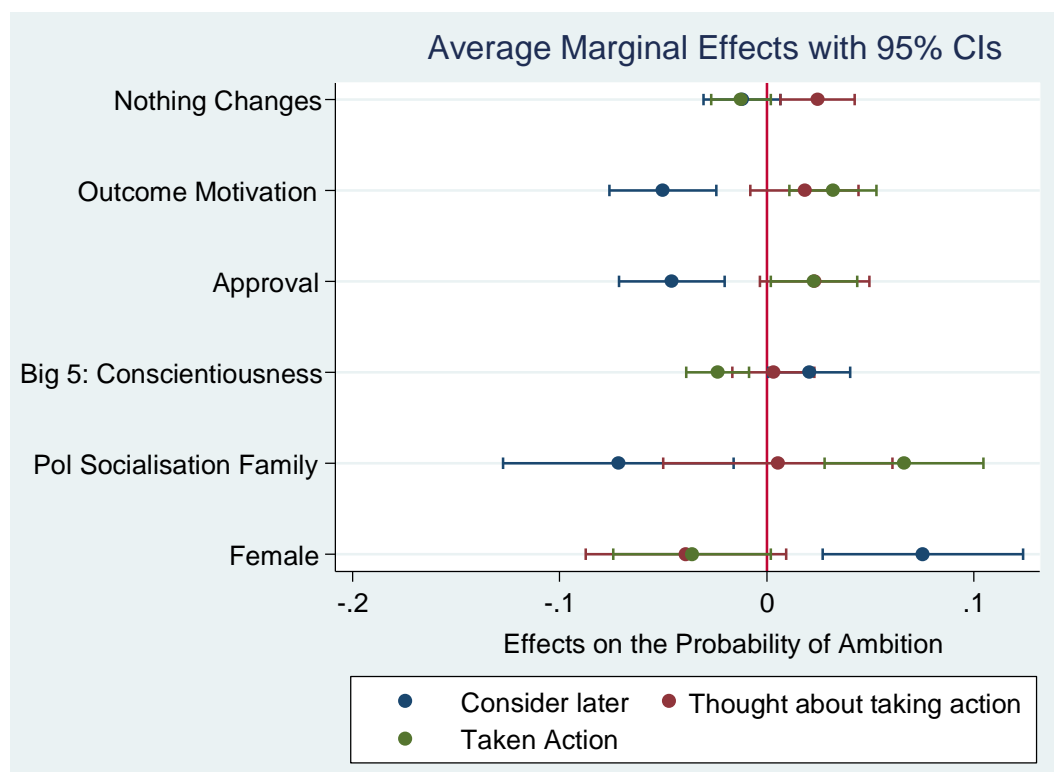
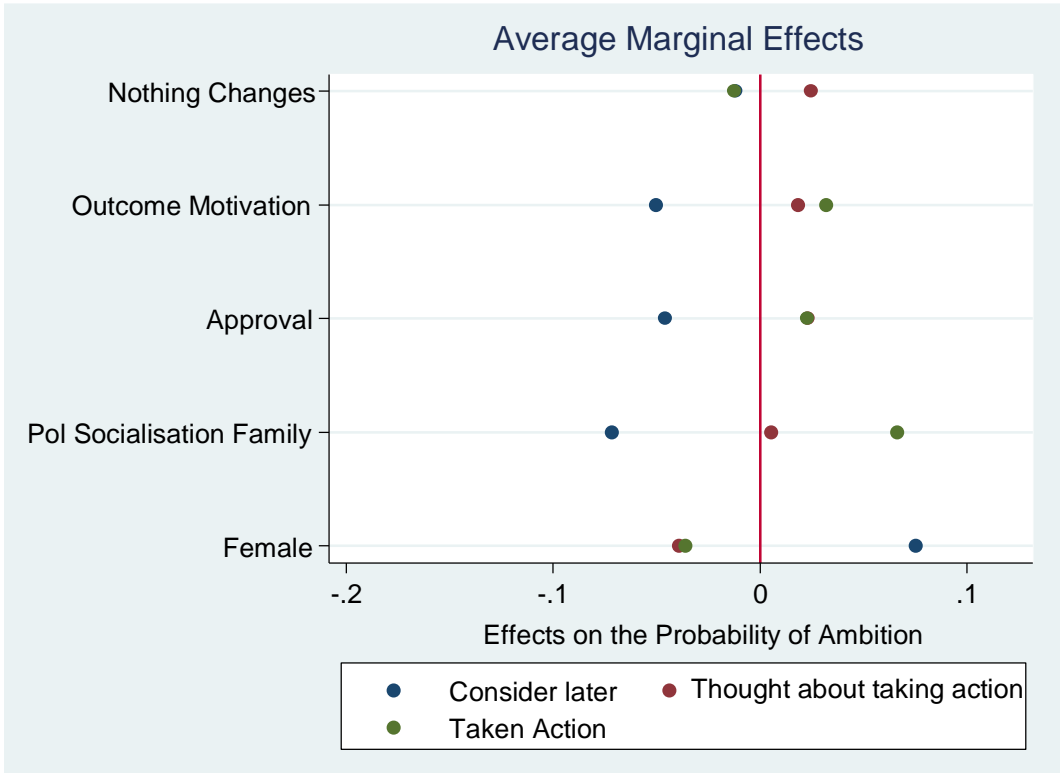


Figure 6: Average Marginal Effects of Significant Variables on Progressive Ambition



N.B. Figure 6 Alternative if the CIs look difficult to interpret



Appendix

Table A1: Logistic Regression Model of those who would consider running later but not now

Variables	Model 1 β SE
Constant	1.12* 0.50
<i>Socio-Demographic</i>	
Female	0.32* 0.11
Age	-0.02* 0.00
Working Class	-0.05 0.12
Married	-0.03 0.11
Non White	0.21 0.24
Carer	-0.11 0.12
Full Time Employment	0.18 0.10
<i>Education (Base = No Quals)</i>	
Secondary& Below	0.04 0.32
Post-Secondary	0.09 0.33
Professional Quals	-0.16 0.33
Degree (UG & PG)	-0.16 0.32
DK/Not Say Education	0.06 0.41
<i>Political Socialization</i>	
Parents	-0.09 0.13
Other Family	-0.33* 0.12
<i>Personality Big Five</i>	
Extraverted	-0.01 0.04
Agreeableness	0.06 0.05
Conscientiousness	0.09* 0.04
Emotionally Stable	-0.03 0.04
Openness	-0.04 0.05
<i>Political System-Efficacy</i>	
Nothing Changes	-0.05 0.04
<i>Achievement</i>	
Achievement Motivation	-0.07 0.05
<i>Outcome</i>	
Outcome Motivation	-0.22* 0.06
<i>Care (Injunctive Norm)</i>	
Approval	-0.20* 0.06
Model Fit	
Chi-Square <0.05*	121.12*
Log Likelihood	-1240.02
R ²	0.05
AIC	2528.04
N	1964

sig <0.05. Note: Model 1 Logit: Bivariate relationship - Female 0.26 (0.10). No interactions with Female were significant either in the logit model.

Figure A1: Average Marginal Effects of Significant Explanatory Variables of Ambition
(from Model 3 including interaction effects)

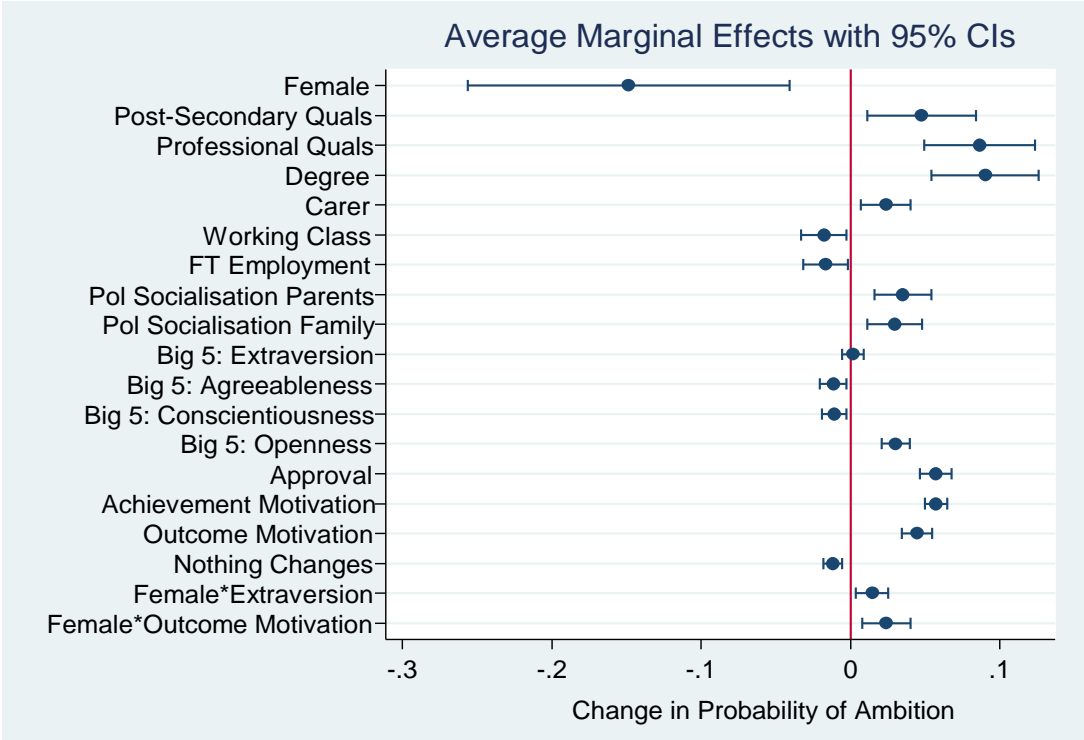


Table A2: Average Marginal Effects (including SEs and CIs) of Progressive Ambition - Significant Variables only from Table 2 Model 1 (Multinomial Logit)

Variables	Not Considering Now			
	dydx	SE	95% CIs	
Female	0.08	0.02	0.03	0.24
Age	-0.01	0.00	-0.01	-0.00
Carer	-0.02	0.02	-0.08	-0.03
Political Socialization Family	-0.07	0.03	-0.13	-0.02
Conscientiousness	0.02	0.01	0.02	0.00
Approval	-0.05	0.01	-0.07	-0.02
Outcome Motivation	-0.05	0.01	-0.08	-0.02
Nothing Changes	-0.01	0.01	-0.03	0.01
Variables	Considering Now			
	dydx	SE	95% CIs	
Female	-0.04	0.02	-0.09	0.01
Age	-0.00	0.00	-0.00	0.00
Carer	-0.03	0.03	-0.08	0.02
Political Socialization Family	0.01	0.03	-0.05	0.06
Conscientiousness	0.00	0.01	-0.02	0.02
Approval	0.02	0.01	-0.03	0.05
Outcome Motivation	0.02	0.01	-0.07	0.04
Nothing Changes	0.02	0.01	0.01	0.04
	Taken Action			
	dydx	SE	95% CIs	
Female	-0.04	0.02	-0.07	0.00
Age	0.01	0.00	0.00	0.00
Carer	0.05	0.02	0.02	0.09
Political Socialization Family	0.07	0.02	0.03	0.10
Conscientiousness	-0.02	0.01	-0.04	-0.01
Approval	0.02	0.01	0.00	0.04
Outcome Motivation	0.03	0.01	0.01	0.05
Nothing Changes	-0.01	0.00	-0.03	0.00

Bold = significant <0.05

Table A3: Descriptives Variables (Details and Scale)

Variables	Scale
Ambition	‘Have you ever thought about putting yourself forward as a candidate for political office’; 1= Yes I have; 0 = No I haven’t
Female	Female = 1; Male = 0
Age	Age (continuous variable): mean = 47.86; SD = 17.06
Working Class	Working Class =1; All other classes = 0
Married	Married = 1; All Others = 0
Non White	Non-White = 1; White = 0
Carer	Carer = 1; Non-Carer = 0
Full Time Employment	FT Employment = 1; All Others = 0

Education	Education (categorical variable – treated in models as separate dummies): No qualifications = 0 (base); Secondary & Below Qualifications = 1; Post-Secondary = 2; Professional Qualifications = 3; Degree (UG & PG) = 4; DK/Not Say Education = 5
Political Socialization: Parents	Political Socialisation (Parents) 1 = Yes; 0 = No
Other Family	Political Socialisation (Other Family) 1 = Yes; 0 = No
Personality Big Five: Extraverted	Extraversion (Likert scale 1-5 where 5 is extraverted)
Personality Big Five: Agreeableness	Agreeableness (Likert scale 1-5 where and 5 is most agreeable)
Personality Big Five: Conscientiousness	Conscientiousness (Likert scale 1-5 where 5 is more Conscientious)
Personality Big Five: Emotionally Stable	Emotionally Stable (Likert scale 1-5 where and 5 is more emotionally stable)
Personality Big Five: Openness	Openness (Likert scale 1-5 where 5 is most open)
Pol System Efficacy: Nothing Changes	'It doesn't matter which political party is in power, nothing ever changes'; Likert Scale 1 = Strongly Disagree; 5 = Strongly Agree
Achievement Motivation	Achievement Motivation Factor: (Power Matters - 'Holding positions of power matters to me'; Thought Powerful - 'I like to be thought of as powerful or influential'; Pol Fulfilment - 'Being a politician would bring me fulfilment'; People Respect Me - 'If I was a politician people would respect me'); Likert Scale 1 = Strongly Disagree; 5 = Strongly Agree. Achievement Motivation Factor: Power Matters .85; Thought Powerful .84; Pol Fulfilment .76; People Respect Me .65 (one component: eigenvalue 2.49; variance explained 60.47%)
Outcome Motivation	Outcome Motivation (Internalised) Factor: (HoldBeliefs - 'It makes me feel good to hold the political beliefs that I do'; Important - 'My political beliefs are an important part of who I am'; Ashamed - 'I would be ashamed to be someone who had no political beliefs at all'; Tell Beliefs - 'I often tell other people about my political beliefs'); Likert Scale 1 = Strongly Disagree; 5 = Strongly Agree Outcome Motivation Factor: HoldBeliefs .83; Important .89; Ashamed .77; Tell Beliefs .73 (one component: eigenvalue 2.60; variance explained 64.88%)
Approval	'People who I care about would support me getting more involved in politics'; Likert Scale 1 = Strongly Disagree; 5 = Strongly Agree

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